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THE ACCURACY OF TEACHERS' JUDGMENTS CONCERNING THE SOCIOMETRIC STATUS OF SIXTH-GRADE PUPILS: PART I*

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SYNOPSIS

This study is an attempt to determine the accuracy of teachers' judgments concerning the degree to which sixth-grade pupils are accepted by their classmates, and the relationship of certain variables to the accuracy of these judgments. The acceptance of sixth-grade pupils by their classmates was determined by a sociometric test and referred to as the pupils' sociometric status.

The method of investigating the problem consisted of the following procedures: A sociometric test administered to the pupils in forty sixth-grade classes requested each pupil to choose the five classmates with whom he would most prefer to work, the five classmates near whom he would most prefer to sit. In addition, each pupil was requested to respond to eight questions concerning the freedom he had in carrying out routine class activities.

Each teacher, in the same forty classes, made judgments concerning the sociometric status of her pupils on the criteria of work companion, play companion, and seating companion. Each teacher also indicated which three boys and three girls she most preferred and which three boys and three girls she least preferred as pupils in her class. Information concerning the teacher's training and experience were obtained for each teacher.

The above data were analyzed with standard statistical procedures and found to be consistent with the following conclusions:

1. There is a difference between teachers in the accuracy of their judgments of the sociometric status of sixth-grade pupils in the classroom. Correlation coefficients representing the average accuracy of each teacher's judgments ranged from .268 to .838, with a mean of .595.

2. There is *no* difference in the accuracy of teachers' judgments of the sociometric status of boys and girls.

3. There is a difference in the accuracy of teachers' judgments of the sociometric status of pupils among the criteria of work companion, play companion, and seating companion.

4. There is *no* relationship between the average accuracy of the teachers' judgments of the sociometric status of pupils and each of the following variables: age of teacher, years of teaching experience, length of time in present position, semester hours of college training, recency of college training, semester hours in education courses, semester hours in psychology courses, size of class, marital status of teacher, and length of time the teacher had been in contact with the class.

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* Part II to appear in next issue.

5. There is a relationship between taking a course in Child Development and more accurate judgments of the sociometric status of pupils.
6. There is a tendency for teachers to over-judge the sociometric status of pupils they most prefer, and to under-judge the sociometric status of pupils they least prefer.
7. There is a negative relationship between the degree to which a teacher's judgments are biased in the direction of her preferences and the accuracy of her judgments of sociometric status.
8. There is *no* relationship between the freedom pupils have in class and the accuracy of teachers' judgments of sociometric status.

CHAPTER I

Introduction

Statement of the Problem

One of the objectives of modern education is the social adjustment of pupils. The extent to which pupils are chosen by their classmates as work companions, play companions, and seating companions is one evidence of social adjustment. This acceptance by peers is highly valued and sought after by the pupil and represents an important domain of pre-adolescent behavior. It should be of major concern to the teacher who is largely responsible for the social development of the members of her class. In an attempt to carry out this responsibility teachers are constantly making judgments concerning the relative acceptability of various members of the class. The extent to which these judgments are accurate determines, in part, the effectiveness of her efforts in this area.

This study is an attempt to determine the accuracy of teachers' judgments concerning the degree to which sixty-grade pupils are acceptable by their classmates, and the relationship of certain variables to the accuracy of these judgments.

Definition of Terms

In order to clarify the terms used in this study, they are defined as follows:

Sociometric test—an instrument which "requires an individual to choose his associates for any group of which he is or might become a member."[1]

Criterion—basis on which associates are chosen on a sociometric test.

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[1] Jacob L. Moreno, *Who Shall Survive?* Washington, D. C.: Nervous and Mental Disease Publishing Co., 1934. P. 11.

In this study the criteria are work companion, play companion, and seating companion.

Sociometric status—degree to which a pupil is accepted by his classmates, in terms of the number of choices he receives from them on a sociometric test.

Teacher preference—status of pupil in terms of whether the teacher most prefers or least prefers having him in her class.

Teacher judgment—relative position of pupils to his classmates in terms of the teachers' estimate of his sociometric status.

Nature of the Study

The general nature of the study is revealed in the statement of the problem. While this reflects the central theme throughout the study there are a number of specific questions for which answers are sought. These questions are listed below to help clarify the exact nature of this study.

1. To what extent are teachers accurate in judging the sociometric status of all pupils in the classroom?
2. Is there any difference between teachers in the accuracy of their judgments?
3. Is there any difference in the accuracy of teachers' judgments of boys and girls?
4. Is there any difference in the accuracy of teachers' judgments on the criteria of seating, play, and work?
5. What is the relationship between the average accuracy of the teachers' judgments and each of the following variables?
   a. Age of teacher.
   b. Years of teaching experience.
   c. Length of time in present position.
   d. Semester hours of college training.
   e. Recency of training.
   f. Semester hours in education courses.
   g. Semester hours in psychology courses.
   h. Size of class.
   i. Marital status of teacher.
   j. Length of contact with class.
   k. Whether or not the teacher had a course in Child Development.
6. Do teachers over-judge those boys and girls they most prefer, and under-judge those boys and girls they least prefer as pupils in class?
7. If the above phenomenon exists, what is the relationship between the degree to which this bias is present in a teacher's judgments and the accuracy of her judgments?

8. What is the relationship between the amount of freedom the pupils feel they have in class and the accuracy of teachers' judgments?

Delimitations of Study

This study is restricted to forty women teachers at the sixth grade level teaching in the Flint, Willow Run, and Ypsilanti public schools. Only women teachers were included in this study for several reasons. First, the teachers at this grade level are predominant women. Second, to include the few men teachers that were available at this grade level would only tend to complicate the results.

Several considerations also prompted the decision to confine this study to the sixth grade level. First, it was desired to obtain a situation in which the teachers were with the same group for the major part of the day. Second, the pre-adolescent period is one of the most important stages in the pupil's social development. Finally, the reliability of the sociometric test has been shown to increase with age, at the elementary level, thereby providing the most reliable bases against which to compare the teachers' judgments.

The selection of the Flint, Willow Run, and Ypsilanti public schools was prompted by the deep interest of the administrators and teachers in problems of social adjustment. The fine coöperation of these administrators and teachers in carrying out this research in their classrooms is gratefully acknowledged.

Method of Investigation

A sociometric test was administered to forty sixth-grade classes. On this test each pupil was asked to choose five classmates with whom he would prefer to work, five classmates with whom he would prefer to play, and five classmates near whom he would prefer to sit. In addition, each pupil was requested to respond to eight questions concerning the freedom he had in carrying out routine class activities.

In the same forty classes the teacher was asked to make judgments concerning the sociometric status of each pupil on the criteria of seating companion, play companion, and work companion. Further, the teacher was asked to indicate which three boys and three girls she most preferred as pupils in her class, and which three boys and three girls she least preferred as pupils in her class. Personal data information regarding the teachers was obtained from school records where possible. Where the school records were not available the teacher was requested to provide the desired information on a personal data sheet.

Organization

The next chapter will review the literature related to this problem. Chapter III will describe the method of investigating the problem, including the procedures and instruments used, description of the subjects, and method of collecting data. Chapter IV will present an analysis of the data and the results of that analysis. Chapter V will contain a summary, conclusions, and implications for further research in this area.

CHAPTER II

RELATED LITERATURE

The literature pertinent to this study falls into three categories: (1) that concerning the use of sociometric tests; (2) that concerning the accuracy of adults' judgments of sociometric status, in childhood and adolescent groups; and (3) that concerning factors which may possibly be related to the accuracy of adults' judgments of sociometric status, in childhood and adolescent groups.

The literature on sociometric testing is voluminous and much of it has no direct bearing on the present problem. Since this is a study of teachers' judgments of pupil sociometric status, only that literature on sociometric testing will be reviewed which is pertinent to this problem.

Sociometric Tests

Moreno,[1] who devised the sociometric technique, defines it as follows:

> An instrument to measure the amount of organization shown by social groups is called a sociometric test. The sociometric test requires an individual to choose his associates for any group of which he is or might become a member.

He cautions that the accurate giving of the test is important if it is to be correctly called sociometric. The two specifications that he sets up to meet this requirement are that the test must "determine the *feelings* of individuals towards each other and, second, to determine these in respect to the *same criterion*."[2]

The sociometric test devised by Moreno was first used in a public school by him in Brooklyn, New York. The boys and girls of all classes

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[1] Jacob L. Moreno, *Who Shall Survive?* Washington, D. C.: Nervous and Mental Disease Publishing Co., 1934. P. 11.

[2] *Ibid.*, p. 15.

from the kindergarten through the eighth grade were requested to choose among their classmates those whom they would most prefer to have sit near them. The results of this first attempt to use a sociometric technique in a classroom were described by Moreno[3] as follows:

> As a consequence of the test given to these pupils a complex structure of the class organization was uncovered, widely differing from the prevalent one. A number of pupils remained unchosen or isolated; a number chose each other, forming mutual pairs, triangles, or chains; others attracted so many choices that they captured the center of the stage like others.

The most extensive research done with the sociometric test in the classroom, and a logical extension of Moreno's original work, was that by Bronfenbrenner.[4] He conducted a sociometric study of 151 elementary school children from the nursery school through the sixth grade. Although his primary purpose was to set up and evaluate a scoring method for sociometric testing, his contributions were many. In the fall and spring term the children at all grade levels were asked to name the classmates they would like best to work with, play with, and have sit near them. These three criteria were selected on the basis of observation of the classes. They were considered to be the ones common to all grade levels; familiar to all members of the group; equally available for all members to participate; and least influenced by extraneous environmental factors.

In deciding whether to use the number of choices received by each child or the number of different persons by whom he was chosen, as the best unit for fine discrimination, Bronfenbrenner[5] states:

> A comparison of indices based on both types of unit revealed that while negative deviations from the expected value were equally marked in one or the other distribution, extreme deviations *in excess* of chance expectancy were obtained only when the number of *choices* rather than the number of *different persons* choosing was utilized for computing indices.

Using the number of choices as an index of sociometric status he made no distinction between a first, second, third, etc., choice. This was prompted by the difficulty of determining the social significance of different choice levels; the dubiousness of assigning a priori values; and the complication of the scoring procedure wth weighted choices.

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[3] Ibid., p. 24.

[4] Urie Bronfenbrenner, "A Constant Frame of Reference for Sociometric Research: Part II, Experiment and Inference," SOCIOMETRY, 7 (February, 1944), 40-75.

[5] *Ibid.*, p. 44.

Through the development and application of a formula based on the Pearson Type III Curve Bronfenbrenner[6] found that the number of choices a pupil receives on a sociometric test is a reliable index of sociometric status, within certain restrictions. In this regard Bronfenbrenner[7] states:

> In summary, for sociometric situations involving as many as three criteria with five choices allotted per person, the total number of choices received by each child may be used with reasonable confidence as a reliable index of sociometric status provided the number of criteria and choices allotted remains constant for all groups tested.

He contends that this holds true if the groups include no less than ten and no more than fifty persons.

Comparing the fall and spring sociometric results, using a total number of choices each child receives as an index of sociometric status, Bronfenbrenner[8] found that sociometric status remained fairly stable. In regard to his findings in this respect, he concludes:

> In classroom situations, marked shifts in sociometric status are comparatively rare. On the whole, children tend to retain the same general social position and this tendency becomes more pronounced in older age groups.

This finding is in general accord with that of Bonney[9] who found sociometric status as stable as that of intelligence and academic attainment. He administered a sociometric test, intelligence test, and general achievement test to the same class of students for three consecutive years when they were in the second, third, and fourth grades. Correlations between the scores of successive grade levels in these measurements were quite high with sociometric status approximately as stable over the three years as intellectual and academic status.

While general ability of sociometric status has been shown, to obtain a true index of the reliability of the sociometric test is a difficult problem. Newstetter, Feldstein, and Newcomb allotted thirty fourteen-year-old boys in a summer camp five choices each for tentmate at two-day intervals,

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6 *Ibid.,* p. 68.

7 *Ibid.,* p. 69.

8 *Ibid.,* p. 73.

9 Merl E. Bonney, "The Relative Stability of Social, Intellectual, and Academic Status in Grades II to IV and the Inter-Relationships between these Various Forms of Growth," *Journal of Educational Psychology,* 34 (January, 1943), 88-102.

the results of which correlated .92 ± .02.[10] Jennings[11] found similar results in a training school for girls using an unlimited number of choices. A four-day re-test of approximately twenty-eight girls on the criterion of *work with, live with, spend leisure time with,* and *study with* yielded a reliability coefficient of .96. Zeleny[12] allotted five choices for membership in a discussion group at two-day intervals, the results of which correlated between .93 and .95. Although these reliability coefficients are high there can be little doubt that the memory factor played a large part in the repetition of the choosing situation. On the other hand, a low correlation between sociometric tests several months apart would not necessarily mean the instrument is unreliable, but may be merely indicating the real changes that have taken place in the social development of the group. In addition to the findings of Bronfenbrenner and Bonney, Jennings[13] also found that sociometric status was fairly stable over several months. A re-test of 131 girls after an eight-month period correlated .65. Despite the fact that "reliability" in its usual meaning cannot be directly applied to the sociometric test, a fair degree of stability of sociometric status is indicated.

Although the sociometric test is said to be valid by definition, in that it purports to measure choice behavior, it is desirable for the purposes of this study to determine if sociometric status is related to other evidences of social adustment.

Jennings[14] has presented data to show that the behavior descriptions of those who receive few choices on the sociometric test are quite different from those who are highly chosen. The personality descriptions were obtained from an analysis of the "complaints" and "commendations" of house mothers concerning each of 124 girls living in a training school for girls. The under-chosen members of the group were characterized most frequently as exhibiting behavior disagreeable to the house mother such as quarrelsome, complaining, nervous, aggressive, and dominant behavior. In addition they were most frequently described as interfering with the group's activities, and exhibiting attention-seeking behavior. On the other

[10] Wilber J. Newstetter, Mark J. Feldstein, and Theodore M. Newcomb, *Group Adjustment: A Study in Experimental Sociology.* Cleveland: School of Applied Sciences, Western Reserve University, 1948. Pp. 35.

[11] Helen H. Jennings, *Leadership and Isolation.* New York: Longmans, Green and Co., 1943. P. 31.

[12] Leslie D. Zeleny, "Sociometry of Morale," *American Sociological Review,* 4 (December, 1939), 804.

[13] Jennings, *op. cit.,* p. 57.

[14] Jennings, *op. cit.,* pp. 144-163.

hand, the over-chosen members were characterized most frequently by behavior regarded as "Commendatory" by the house mother, such as cooperative even disposition, initiative, non-attention-seeking, etc., behaviors.

A similar relationship between behavior descriptions and number of choices received on a sociometric test in a classroom situation was found by Olson.[15] He asked teachers in ten elementary school classes to make comments about each child concerning factors that may affect the number of choices received on a sociometric test. The social and emotional factors were categorized and compared to the number of choices the children received. Those children classified as ill, sulky, conduct problems, bossy, new in class, and shy tended to be below the mean in number of choices received; whereas those classified as good natured, quiet, friendly, well adjusted, and dependable tended to be above the mean in the number of choices received.

Bonney[16] also found significant differences in the personality traits of those highly chosen by their classmates and those chosen by few. He administered a sociometric test to three fourth-grade classes and compared the results with teacher and pupil ratings of members of the class, on twenty personality traits. In describing the personality traits which distinguished the high chosen from those receiving few choices, Bonney[17] concludes:

> . . . the traits which proved most significant in differentiating between the popular and unpopular children may be organized into two syndromes. The first syndrome is composed of strong, aggressive personality traits such as leadership, enthusiasm, daring, and active participation in recitations. The second syndrome is not so definite but is composed of traits which count the most in direct inter-personal contacts, such as a pleasing appearance, a cheerful disposition, and friendly attitudes.

Kuhlon and Lee[18] conducted a similar study on sixth, ninth, and twelfth grade students with similar findings. Those receiving the largest number of choices were judged most frequently as being popular, cheerful

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[15] Willard C. Olson, *Child Development*. Boston: D. C. Heath and Company, 1949. Pp. 200-201.

[16] Merl E. Bonney, "Personality Traits of Socially Successful and Socially Unsuccessful Chidren," *Journal of Educational Psychology*, 34 (November, 1943),449-472.

[17] *Ibid.*, p. 458.

[18] Raymond G. Kuhlon and Beatrice J. Lee, "Personality Characteristics and Social Acceptability in Adolescence," *Journal of Educational Psychology*, 34 (November, 1943), 321-340.

and happy, enthusiastic, friendly, able to enjoy jokes, and to initiate games and activities.

In a study concerning the relationship of personal problems to sociometric status Kuhlon and Bretsch[19] administered a sociometric test and the Mooney Problem Check List to about 700 ninth-graders. On the problem check list the students were asked to check each item in the category of never, sometimes, or often. They found that those with lowest sociometric status (bottom quartile) checked more personal problems "often" than the top quartile in sociometric status. Those personal problems that were checked "often" by the low sociometric status group revealed greater concern with social skills, unhappiness and lack of status, family problems, and dislike of school.

Northway[20] made an intensive study of the personality traits of this low sociometric status group (lower quartile). In a sociometric study of eighty fifth and sixth grade pupils she selected the twenty least chosen members for special clinical study concerning their personality make-up. She found that this low sociometric status group fell into three distinct personality patterns—the listless, recessive children; the quiet and retiring, socially uninterested children; and the noisy, rebellious, socially ineffective children.

The past several studies have shown that sociometric status is related to other evidences of social adjustment. In this respect the sociometric test may be considered valid for the purposes of this study.

Judgment of Sociometric Status

Ever since Moreno devised the sociometric technique there has been some question concerning the extent to which an outside observer could judge the sociometric status of members of a group. In his original administration of the test to all classes of the first eight grades of a Brooklyn public school Moreno[21] asked the teachers to judge which boy and girl would receive most of the choices from their classmates and which two would receive next most. In addition he asked them to judge which two would receive the least choices and which two would receive the next least. Concerning the over-all accuracy of the teachers' judgments he stated:

19 Raymond G. Kuhlon and Howard S. Bretsch, "Sociometric Status and Personal Problems of Adolescents," SOCIOMETRY, 10 (May, 1947), 122-127.

20 Mary L. Northway, "A Study of the Personality Patterns of Children Least Acceptable to Their Age Mates," SOCIOMETRY, 7 (February, 1944), 10-25.

21 Moreno, op. cit., p. 25.

In 48 per cent of the instances the teachers' judgments coincided with the findings through the sociometric test in respect to the two most chosen boys and girls; in 38 per cent of the instances in respect to the least chosen boys and girls in her classroom.

He found that the degree of accuracy varied with the grade level, having its highest point in the kindergarten and first grade and declining as the grade level increased. The average degree of accuracy was thirty per cent at the sixth grade level. This declining accuracy he attributes to increasing complexity of groups, and the development of a social cleavage between adults and children. Concerning the lack of insight teachers have into children's groups Moreno[22] comments:

> The teachers' judgments concerned only the extremes in position. The average positions of individuals are, it is evident, far more difficult to estimate accurately. The intricacies of the children's own associations prevent the teacher from having a true insight. This fact appears as one of the great handicaps in the development of teacher-child relationships.

It is regrettable that more research workers did not follow Moreno's cue and explore this important area. Only a few studies are available concerning the adult's ability to judge the sociometric status of members of childhood and adolescent groups. In the majority of these investigations this judgment of sociometric status was incidental to other purposes, and consequently a limited number of subjects were used.

Bonney[23] in a sociometric study of the fifth grade had three teachers, at the end of the year, make judgments concerning the pupil's sociometric status. The teachers were asked to place the pupils in five categories—highest group, above average, about average, below average, and lowest group. They were told they need not place the same number in each group. Comparing this teacher grouping of pupils with the sociometric results Bonney[24] found that "approximately ninety per cent of the children were placed by the teachers, either in the same quintile, or only one removed from that in which they were placed by pupil choices."

In another, more comprehensive study, by Bonney[25] thirteen teachers

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[22] Moreno, *op. cit.*, p. 54.

[23] Merl E. Bonney, "The Constancy of Sociometric Scores and Their Relationship to Teacher Judgments of Social Success, and to Personality Self-Ratings," Sociometry, 6 (November, 1943), 409-424.

[24] *Ibid.*, p. 419.

[25] Merl E. Bonney, "Sociometric Study of Agreement Between Teacher Judgments and Student Choices," Sociometry, 10 (May, 1947), 133-146.

were asked to make judgments concerning the sociometric status of 291 high school students. The students were asked to select their two best friends. The results of this choosing situation were divided into three groups—high, middle and low. The high group consisted of those students who received three or more choices and contained forty-five students; the middle group one or two choices and contained thirty-five students; and the low group no choices and contained thirty students. Each category had approximately an equal number of boys and girls. Three months after the students made their choices the thirteen teachers were asked to rate the students in the high, middle, or low group on the basis of their estimate of how many choices each student received. An "unable to judge" category was used where the teacher did not know the student well enough to judge. The teachers were told how many students were included in each group on the basis of choices and were told to try to place the same number in each group. However, this could not be done due to the large number of "unable to judge" ratings. Approximately forty-four per cent of the ratings fell in this category. Of the remaining ratings twenty-one per cent were in the high group; twenty-three per cent in the middle group; and eleven per cent in the low group. The average accuracy of teachers' judgments was forty-five per cent for the high and middle group, and twenty-eight per cent for the low group. However, the few ratings in the low group plus the large number of ratings in the "unable to judge" category make the results of dubious value, if not altogether uninterpretable.

A much more limited study was carried out in a summer camp. In this setting Newstetter, Feldstein, and Newcomb[26] asked six counselors to make judgments concerning the sociometric status of thirty fourteen-year-old boys, who had been allotted five choices each for tentmate preference. The counselors rated these thirty boys on a seven-point scale for sociometric status. The correlation between the counselors' judgments and the boys' choices revealed a mean coefficient of $.756 \pm .20$. The reiability of the ratings was determined by correlating the judgments of raters for a one-week interval. These correlations ranged from .830 to .998, with a mean correlation of $.945 \pm .01$.

While these results are encouraging and reveal that an adult can have considerable insight into the group life of children and adolescents, as measured by a sociometric test, they cannot be transferred *in toto* to the classroom situation. The informality and freedom of camp life is quite differ-

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[26] Newstetter, Feldstein, and Newcomb, *op. cit.*, pp. 35-53.

ent from the usual classroom routine. In addition, the restriction of the camp population to boys simplifies the judgment situation over that of the classroom where sexes are mixed.

This may provide a good point to sum up the major shortcomings of all of the above studies in judgment of sociometric status. No mention was made of differences between the judges in any of the above studies. The underlying assumption seemed to be that all adults are equally capable of judging sociometric status in childhood and adolescent groups. Certainly one would expect the judges to vary in the amount of insight they have into group structure. This area may have been avoided due to the limited number of judges used, which is a second shortcoming of the above studies. While Moreno's[27] study shows that the accuracy of teachers' judgments declined gradually from the kindergarten to the seventh grade, might that not be explained in part by differences of the ability of teachers to judge sociometric status, rather than solely on the basis of declining insight into older age groups. The fact that the accuracy of teachers' judgments in this study increased from twenty-five per cent in the seventh grade to forty per cent in the eighth grade would tend to indicate such an assumption. Regardless, the lack of information on the differential ability of the teachers to make such judgments plus the limited number of teachers at each grade level causes the results to be questionable.

In Bonney's[28] fifth grade study only three teachers were used, which would limit the value of any statements that could be made about differential ability to make such judgments. In his[29] more extensive study at the high school level thirteen teachers were used, but they were asked to judge the sociometric status of students, approximately half of whom they did not have an opportunity of observing in groups. Another criticism of this latter study might be that he had the teachers make their judgments three months after the administration of the sociometric test. While large shifts in sociometric status are rare, it is to be expected that some shifts in status will take place over a three-month period.

Factors Affecting Judgment of Sociometric Status

Due to the few studies in this area of judgment it should be important to consider what are some of the factors that may possibly influence the

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[27] Moreno, *op. cit.*, p. 28.
[28] Bonney, *op. cit.*, p. 419.
[29] Bonney, *op. cit.*, pp. 133-146.

judgment of sociometric status. Travers[30] in a study concerning the judgment of the opinions of groups found that "the individual tends to overestimate the percentage of the group being judged who thinks as he does." It would be valuable to know if such a bias exists in the teachers' judgment of a sociometric status. Stated another way, would the teacher tend to overestimate the sociometric status of pupils she most prefers? The possibility of such a bias existing is revealed in a statement by Stokes.[31] He states:

> One common error on the part of teachers is to confuse social adjustment between children with social adjustment between adults and children. The two are not necessarily antithetical but it is perfectly possible for a child to achieve satisfactory relationships between himself and his teachers, and yet fail to make himself acceptable to his peers. The converse is equally true; and all the shades of variation between these extremes also.

If teachers do tend to confuse social adjustment between children with social adjustment between adults and children then Tryon's[32] findings would imply that the teacher's judgment of a sociometric status would be more accurate with girls than with boys. She made a study of the personality characteristics 350 pupils considered desirable in each other, and concludes, in part:

> For the twelve-year-old girl, quiet, sedate, non-aggressive qualities are associated with friendliness, likeableness, good humor, and attractive appearance. Behavior which conforms to the demands and regulations of the adult world is admired.
> At the twelve-year level the idealized boy is skillful and a leader in games; his daring and fearlessness extends beyond his social group to defiance of adult demands and regulations. Any characteristic which might be construed as feminine by one's peers such as extreme tidiness or marked conformity in the classroom is regarded as a weakness.

If such sex differences exist in traits pre-adolescent pupils consider de-

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[30] Robert M. W. Travers, *A Study in Judging the Opinions of Groups.* Archives of Psychology, No. 266. New York: Bureau of Publications, Columbia University, 1941. P. 66.

[31] Stuart Stokes, *The Sociol Analysis of the Classroom.* Division on Child Development and Teacher Personnel, American Council on Education, January, 1940 P. 2.

[32] Caroline M. Tryon, *Evaluations of Adolescent Personality by Adolescents.* Monographs of the Society for Research in Child Development, IV. Washington: National Research Council, 1939. P. 77.

sirable in one another then it is conceivable that the teacher's judgment of the sociometric status of girls would be more accurate than that of boys.

Bonney,[33] who made a similar study concerning the sex differences of personality traits on the fourth-grade level, found that traits admired by adults consistently favored the girls although the sex differences were not large.

Although there are no studies directly concerning the personal data variables which may possibly affect the teachers' judgments of pupil sociometric status in the classroom a study by Kelly and Perkins[34] may shed some light on this area. They determined the relationship between various personal data variables and the teachers' knowledge of child and adolescent behavior, as measured by an objective test, for both grade school and high school. A brief summary of their conclusions follows:

There were significant relationships between mean scores and the following variables:

1. Number of years of training. For both grade school and high school.
2. Number of courses in education. For both grade school and high school.
3. Number of courses in psychology. For grade school.
4. Recency of training. For grade school.
5. Length of time in present position. For grade school.
6. Subject taught. For high school.
7. Age for high school.
8. Sex for high school.
9. Marital states. For high school.
10. Having children. For high school.

Since the first five personal data variables show a significant relationship to the elementary teachers' knowledge of child and adolescent behavior it would be interesting to determine if this relationship exists in the application of that knowledge to a restricted area, as represented in the present study.

Summary

The sociometric test has been described and its use in classroom situa-

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[33] Merl E. Bonney, "Sex Differences in Social Success and Personality Traits," *Child Development,* 15 (March, 1944), 63-79.

[34] Ida B. Kelley and Keith J. Perkins, *An Investigation of Teachers' Knowledge of and Attitudes toward Child and Adolescent Behavior in Every Day School Situations.* Purdue University Studies in Higher Education, XLII. Lafayette, Indiana: Purdue University, 1941. P. 101.

tions illustrated. Studies have revealed that the total number of choices received by an individual on a sociometric test may be used as a reliable index of sociometric status, where no more than three criteria and five choices are used, and where the groups include no less than ten and no more than fifty persons.

It has been shown that sociometric status is fairly stable. It has also been shown that sociometric status is related to other evidences of social adjustment.

Several studies concerning the judgment of sociometric status have been reviewed and their shortcomings pointed out. Their major shortcomings were insufficient number of judges, and lack of information concerning the differential ability of judges to make such judgments.

Several factors which may possibly affect the accuracy of teachers' judgments were revealed in the literature. These were personal bias, sex differences among pre-adolescents, and personal data variables among teachers.

It may be concluded that the literature pertinent to this problem has furnished many valuable leads, but has not satisfactorily answered any of the questions raised in the first chapter.

CHAPTER III

METHOD OF INVESTIGATING THE PROBLEM

This study has been defined, in the first chapter, as an attempt to determine the accuracy of teachers' judgments concerning the degree to which sixth-grade pupils are accepted by their classmates, and the relationship of certain variables to the accuracy of these judgments.

GENERAL PROCEDURE

The general procedure used in this study may be described as follows: A sociometric test was administered to forty sixth-grade classes. On this test each pupil was asked to choose five classmates with whom he would prefer to work, five classmates with whom he would prefer to play, and five classmates near whom he would prefer to sit. The number of choices each pupil receives on each of the above criteria, indicates the degree to which he is accepted by his classmates as work companion, play companion, and seating companion. This acceptance is referred to as the sociometric status of the pupil. In addition to the sociometric test each pupil was requested to respond to a pupil activity form. This form was concerned with

the freedom the pupils had in choosing their own companions for routine class activities. It was used to measure the opportunity pupils were given to exhibit choice behavior, observable to the teacher.

In the same forty sixth-grade classes each teacher was requested to make judgments concerning the sociometric status of the pupils in her class. These judgments were made separately for boys and girls in the following manner. The teacher wrote the names of the boys, in her class, in alphabetical order on a previously prepared teacher judgment form. To the right of the boys' names were three columns, one each for work companion, play companion, and seating companion. In the work companion column the teacher ranked the boys in the order in which she judged they would be accepted by their classmates as work companions. This was repeated for each boy's acceptance as play companion and seating companion. Continuous ranks were used in each column with the teacher ranking from the ends of the distribution toward the center. When the teacher had completed her judgments for boys the above procedures were repeated for girls, on a separate judgment form.

This procedure provided six sets of judgments for each teacher: one each for the sociometric status of boys as work companion, play companion, and seating companions; and one each for the sociometric status of girls as work companion, play companion, and seating companion. Thus the teacher's judgments of boys and girls could be compared directly with the sociometric results on each criterion, and the accuracy of her judgments determined.

In addition to these judgments each teacher was requested to indicate which three boys and three girls she most preferred as pupils in her class, and which three boys and three girls she least preferred as pupils in her class. This information was sought in order to determine the relationship between the teacher's preference for certain pupils and the accuracy of her judgments.

Personal data information regarding the teachers was obtained from the school records where possible. When the school records were not available the teacher was requested to provide the desired information on a personal data sheet.

DEVELOPMENT OF INSTRUMENTS USED IN THIS STUDY[1]

A brief discussion of the development and nature of the instruments used in this study follows.

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[1] Copies of the instruments used in this study are in the appendix, in the order in which they are described here.

Sociometric Test

Several considerations were necessary in the selection of criteria for the sociometric test. First, they had to be familiar to all teachers, as well as all pupils, at the sixth-grade level. Second, they had to be concerned with activities which occurred within the realm of the teacher's daily observation. Third, they had to concern activities where the choice of classmates was a normal procedure. Finally, they had to concern activities which were common from class to class. It was decided that the only criteria which adequately met these requirements were the three used by Bronfenbrenner.[2] These are work companion, play companion, and seating companion.

The criteria were placed in statement form, and the directions indicated the pupils' choices were to be in terms of the children they most preferred for each activity. The three statements of choice appear on the sociometric form as follows:

1. I would choose to *work* with these children:
2. I would choose to *play* with these children:
3. I would choose to have these children *sit near* me:

A space for five names was left under each statement, and the pupils were requested to make five choices for each. The use of five choices was prompted by a desire to obtain the sociometric status of the pupils on each criterion. Five choices were necessary to obtain the proper spread of scores for this purpose. In addition, Newstetter, Feldstein, and Newcomb[3] found that the reliability of sociometric status, on one criterion, increased with the number of choices up to five. Choices beyond that number made no appreciable change.

The choosing, on each criterion, was confined to pupils within their own class. This was necessary since the teacher's judgments were to be based on the classroom situation. This was thought to be a normal choice procedure, in keeping with the pupil's usual class experience. During regular class hours the pupil's choice of work, play, and seating companions is restricted to his own classmates. The more physical environment confines his choice behavior to this group.

At the top of the sociometric form the pupil's name, school, age, and sex were requested. This information was used to describe the student

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[2] Bronfenbrenner, *op. cit.*, p. 43.

[3] Newstetter, Feldstein, and Newcomb, *op. cit.*, p. 35.

population, and enabled the sociometric results to be analyzed separately for boys and girls.

Pupil Activity Form

This form was devised in an attempt to obtain information regarding the freedom of activity the pupils had in class. The assumption underlying its construction was as follows: If pupils were allowed freedom in carrying out class activities, and selecting their own companions for these activities, they would be exhibiting overt choice behavior observable to the teacher. Thus the teacher would have a better basis for her judgments of sociometric status than where this freedom was not permitted. Consequently it was expected that her judgments would be more accurate. The above assumption was to be tested by determining the relationship between the responses to the pupil activity form and the accuracy of the teacher's judgments.

This form consisted of eight questions to which the pupils were asked to respond. The first question was concerned with the number of different pupils they studied or worked with in class during the past week. Numbers from one to fifteen followed the question and the pupils were asked to underline the most appropriate number. Questions two, five, and seven were concerned with whether or not the pupils were permitted to choose their own work, play, and seating companions in class. The remaining questions were concerned with the freedom allowed the pupils in their daily associations with classmates. Each of these last seven questions was followed by two alternatives and the pupils were instructed to underline the one which best answered the question.

The pupils were requested not to put their names on this form since the majority of the questions concerned the teacher. It was believed that this would prevent the pupils from fearing exposure of their answers, and would thereby elicit more honest responses.

Teacher Judgment Forms

In the construction of the teacher judgment forms it was decided that several requirements had to be met. First, the teachers' judgments of sociometric status should be separate for boys and girls. This was considered necessary since boys and girls seldom choose members of the opposite sex as comparions at the sixth-grade level. The varying number of boys and girls in each class would tend to complicate the results if they were not considered separately. Second, the teachers' judgment should be in terms of the same criteria used in the sociometric test administered to the pupils. This was considered necessary in order to make the teachers'

judgments comparable to the sociometric results. Third, the teachers' judgments should be in the form of continuous ranks. This would force the teacher to judge the relative acceptance of each pupil. In addition, it would provide a type of judgment familiar to the teacher, since she is constantly comparing one pupil with another during the course of her teaching. Fourth, the teachers' judgments should be made from the extremes of the distribution toward the center. It was believed that this procedure would enable the teacher to make her judgments more easily and more efficiently.

In accord with the above considerations, two similar judgment forms were constructed—one for the teacher's judgments of girls, and one for the teacher's judgments of boys. The forms were arranged in such a way that the names of the boys and girls could be written in alphabetical order on their respective sheets. To the right of the names were three columns, one each for seating companion, play companion, and work companion. This arrangement permitted the teacher to rank the pupils in the first column, fold it back underneath the page, and then rank the pupils in the next column, etc., obtaining as independent judgments as possible on each criterion.

Two instruction sheets accompanied the teacher judgment forms. The first sheet explained the nature and purpose of the sociometric test given to the class, and the general nature of the judgments to be made by the teacher. The second sheet outlined in detail the specific procedures to be followed in making her judgments. The teachers were instructed to rank the boys in each column first, and then rank the girls in each column.

Although the instructions requested the teacher to circle the rank numbers of those who they believed would receive no choices on the sociometric test, this aspect of the instructions had to be deleted. The majority of the teachers stated that all pupils would receive some choices, and therefore no isolates could be indicated. The sociometric results later indicated that this was true.

Teacher Preference Form

This form provided a space for the teacher to list the names of the three boys and three girls she most preferred as pupils in her class, and the three boys and three girls she least preferred as pupils in her class. The accompanying instructions requested the teacher to base her preferences on the assumption that her class was to be divided into two sections, and she was to choose the pupils she would most and least prefer in her section. She was further instructed to make her selections solely on the basis of

how much she would, or would not, enjoy having them as pupils in her section.

This instrument was used to determine the relationship between the teacher's preference for certain pupils and the accuracy of her judgments. It was believed that the extremes of the teacher's preferences were sufficient for the above purpose.

Teacher Personal-Data Form

The personal-data form was constructed for the obtainment of information on the teacher's age, length of teaching experience, length of time in present position, total number of semester hours of college training, recency of college training, number of semester hours in psychology, whether or not a course in child development had been taken, and whether single or married. The length of time the teacher had been in contact with her class was obtained directly from the teacher.

These personal-data variables were collected in order to determine their relationship to the accuracy of the teacher's judgments.

DESCRIPTION OF SUBJECTS

The subjects consisted of forty teachers and 1,258 pupils in forty sixth-grade classes from the Flint, Willow Run, and Ypsilanti public schools. The distribution by schools of sixth-grade classes included in the study may be seen in Table I. Examination of this table reveals that the majority of classes were located in the Flint public school system. The city of Flint is a typical industrial metropolis which contains a cross-section of most creeds, nationalities, and social classes.

The school system in Flint varies in type of organization at the elementary level. The majority of the elementary schools are organized under the *platoon system*. With this arrangement the pupils spend half of the day with a home-room teacher. The remaining half-day is spent by the pupils in special classes, with a different teacher for each class. All of the Flint elementary schools included in this study, except one, are organized under the *platoon system*. This lone exception is Doyle, which is organized along traditional lines.

All sixth-grade classes from Flint, included in this study, were home-room classes where the teacher spent at least a half-day period with the pupils. The remaining sixth-grade classes, from Willow Run village and Ypsilanti, are organized along traditional lines, with the teacher spending the entire day with the pupils.

TABLE I

DISTRIBUTION BY SCHOOLS OF SIXTH-GRADE CLASSES INCLUDED IN STUDY

Name of School	Number of Sixth-Grade Classes	Number of classes Included in Study
Flint		
Civic Park	3	3
Cody	2	2
Cook	1	1
Dort	3	3
*Doyle	2	1
Durant	2	2
Garfield	3	3
Homedale	1	1
*Jefferson	2	1
Lewis	3	3
Martin	1	1
*McKinley	2	1
Oak	2	2
Stevenson	2	2
Walker	3	3
Washington	2	2
Zimmerman	3	3
Willow Run		
Foster	2	2
Ross	1	1
Spencer	1	1
Ypsilanti		
Central	2	2
Total	43	40

*These three classes were eliminated because the teacher had already administered a sociometric test to her class.

Willow Run village is a war-born government housing project made up largely of industrial workers. Ypsilanti is a small college and industrial city.

Pupil Population

The 1,258 pupils were fairly evenly divided by sex. There were 632 boys and 626 girls. The average age of the boys was 11.8, while the average age of girls was 11.5.

The number of pupils per class ranged from fifteen to forty-three, with an average of thirty-two. The pupil population was almost entirely

white.   Only five of the 1,258 pupils were colored and they were distributed among four classes.

Teacher Population

The teachers participating in this study consisted of forty women all of whom were white.   The personal-data factors describing the teacher population are presented in Tables II through VIII.

TABLE II
AGES OF TEACHER POPULATION (N = 40)

Age	Frequency
21-25 years	4
26-30 years	3
31-35 years	0
36-40 years	1
41-45 years	4
46-50 years	10
51-55 years	9
56-60 years	4
60-65 years	5

Mean age = 47.5 years.

TABLE III
YEARS TEACHING EXPERIENCE AND YEARS IN PRESENT POSITION (N = 40)

Years	Frequency—Teaching Experience	Frequency—Present Position
1- 3	3	7
4- 6	3	7
7- 9	1	4
10-12	1	4
13-15	2	0
16-18	4	1
19-21	3	5
22-24	3	5
25-27	8	5
28-30	12	2

Mean Years Teaching Experience = 20.5.
Mean Years Present Position = 13.6.

TABLE IV
SEMESTER HOURS CREDIT EARNED IN COLLEGE (N = 40)

Semester Hours	Frequency
61- 70	2
71- 80	0
81- 90	4
91-100	2
101-110	2
111-120	16
121-130	10
131-140	0
141-150	4

Mean Semester Hours = 114.0.

TABLE V
RECENCY OF COLLEGE TRAINING BASED ON MIDPOINT BETWEEN FIRST AND LAST DATES OF TRAINING (N = 40)

Years	Frequency
1925-1926	6
1927-1928	3
1929-1930	9
1931-1932	8
1933-1934	5
1935-1936	2
1937-1938	0
1939-1940	1
1941-1942	1
1943-1944	5

Mean Year = 1932.

TABLE VI
SEMESTER HOURS CREDIT EARNED IN EDUCATION COURSES (N = 40)

Semester Hours	Frequency
10-12	4
13-15	4
16-18	2
19-21	8
22-24	12
25-27	3
28-30	2
31-33	1
34-36	1
37-39	2
40-42	1

Mean Semester Hours = 22.2.

TABLE VII

SEMESTER HOURS CREDIT EARNED IN PSYCHOLOGY COURSES (N = 40)

Semester Hours	Frequency
3- 4	8
5- 6	12
7- 8	4
9-10	4
11-12	4
13-14	0
15-16	2
17-18	2
19-20	2
21-22	2

Mean Semester Hours = 8.9.

An examination of the first six tables will reveal that there is a wide spread of all personal-data variables among the forty teachers. The average teacher, representing this group, would be approximately forty-seven years of age with twenty years of teaching experience. Approximately thirteen of these years would have been spent in her present position. She would have 114 hours of college credit, half of which would have been earned before 1932. Twenty-two of these credits would be in education courses, and approximately nine in psychology courses. In general, the teacher population is a rather highly experienced and mature group.

Table VIII reveals that eighteen of the teachers were single, in comparison with twenty-two married. Sixteen of the teachers were with their

TABLE VIII

DIVISION OF TEACHER POPULATION ACCORDING TO MARITAL STATUS; LENGTH OF CONTACT WITH CLASS; AND WHETHER OR NOT TEACHER HAD COURSE IN CHILD DEVELOPMENT (N = 40)

	Frequency
Single	18
Married	22
One Semester with Class	16
Two Semesters with Class	24
Had Course in Child Development	15
No Course in Child Development	25

classes only one semester. This situation resulted from the fact that some elementary schools in Flint have mid-year promotions. The remaining twenty-four teachers were with their classes the entire year. Of the forty teachers participating in this study, fifteen had taken a course in Child Development and twenty-five had not taken such a course.

COLLECTION OF DATA

The data used in this study were collected during the last three weeks of May, 1949. The administrative and supervisory officials of the Flint, Willow Run, and Ypsilanti public school systems were contacted early in May and arrangements were made to meet with the forty sixth-grade classes. A schedule of meetings with the classes were set up and the investigator contacted each class during its regular school time. The fine coöperation of the principals and teachers enabled this research to be carried out in a natural setting.

The teachers prepared their classes for the arrival of the investigator, but the pupils were not informed of the nature of their participation. The teachers, likewise, were made aware of the fact that the investigation was a study concerning teacher judgment, but the exact nature of the study was not revealed to them until the time of the sociometric testing.

Procedure in Collection of Data

In contacting each of the forty sixth-grade classes the investigator was introduced to the teacher by the principal. After giving the teacher a brief explanation of the nature and purpose of the investigation, out of hearing of the students, the teacher introduced the investigator to the class and then turned the class entirely over to him, returning to her desk. The verbal introduction and directions, of the investigator to the pupils, were standard for all classes. The verbal directions were as follows:

I am making a study of classroom groups to find out what a classroom would be like if every pupil would choose his own *work companions,* his own *play companions,* and his own *seating companions.*

On this sheet that I shall give you (demonstrating sociometric form) there is a place for the names of *five pupils with whom you would most prefer to work; five pupils with whom you would most prefer to play; and five pupils whom you would most prefer to have sit near you.* Write here (pointing to spaces for names) the names of those whom you would choose. You may choose anyone *in this class* you wish, including those pupils who are absent. Your choices will not be mentioned to anyone else. Give both first and last names. Spell them the best you can.

Please make your choices thoughtfully and carefully, for the value of this whole study depends on how accurately you do this.

When I give you this sheet (demonstrating sociometric form) print *your name, school,* whether you are *boy or girl,* and give your *age*—at the top of the sheet. When you have done this please look up, so I will know you are ready to start. Do not write any choices on your paper yet.

At the conclusion of those verbal directions a copy of the sociometric test was passed to each pupil. After all students had completed filling in the personal data at the top of the form, the investigator said:

Now, place number—in the top right-hand corner of your paper..

This referred to a code number assigned to each class, to prevent mixing up the sociometric tests from different classes. It also enabled the teachers' responses to be anonymous to everyone but the investigator. When the pupils had placed the code number in the top right-hand corner they were told:

Remember!

1. Your choices must be from pupils *in this class,* including those who are absent.
2. You must give both *first* and *last* names, spelling them the best you can.
3. Your choices will *not be seen* by anyone else.
4. You may choose a pupil for more than one thing if you wish.

With the above reminder the pupils were given permission to start. The adequacy of the above directions, and the rapport established with the pupils, was revealed by their response to the test situation. All pupils approached the task seriously and diligently. Every one of the pupils, in all classes, made five choices for each criterion. None of the pupils wrote in a fictitious name, or the name of a person outside of their class.

When the pupils began the sociometric test the investigator gave the teacher a self-addressed envelope which contained the Teacher Judgment Forms and the Teacher Preference Form. These forms, and the envelope, each bore the code number which was assigned to her class. The teacher was requested to read the directions for each form, to make certain they were clearly understood. In addition to its major purpose this procedure kept the teacher occupied at her desk, thus preventing her from observing the pupils' responses to the sociometric test.

When the pupils had completed the sociometric test, they were col-

lected by the investigator. A copy of the Pupil Activity Form was then passed to each pupil, with the following directions:

There are eight questions on this sheet. Please read each question, and *underline* the answer which you think best answers the question. Please do not ask any questions about this sheet, but do it the best you can.

You need not put your name on this sheet, but place number—in the top right-hand corner.

The pupils were then told to begin. When the Pupil Activity Form was completed by the students it also was collected by the investigator. None of the teachers had seen any of the responses, either to the Sociometric Test or the Pupil Activity Form.

Before the investigator departed he checked with the teacher to make sure the procedures for making her judgments and preferences were clearly understood. At this time, the teacher was reminded that in recording her judgments there could be no ties in rank. The teacher was then requested to complete the forms as soon as possible and mail them to the investigator.

The adequacy of the above procedure was revealed by the quick return and the completeness of the responses to the forms. The majority of the teacher-forms were received within a few days after the sociometric testing of the class. The remainder were received within two weeks after the testing. All teachers had filled out the forms according to the directions.

The personal-data factors, concerning the teacher, were gathered from the school personnel records in the Flint school system. In the other two schools a personal-data form was included in the envelope left with the teacher. She was requested to fill it out along with the other forms.

SUMMARY

The general procedure used in this study has been described. In brief, it consisted of measuring the acceptability of pupils to their classmates by means of a sociometric test, and having teachers make judgments concerning that acceptance. In addition, information was gathered on the freedom of activity the pupils had in class, the teachers' preferences for certain pupils, and personal-data factors regarding the teacher. Information on these variables was obtained in order that their relationship to the accuracy of the teachers' judgments might be determined.

The development and nature of the instruments used in this study was discussed. These instruments are the sociometric test, pupil activity form,

teacher judgment forms, teacher preference form, and the personal data-form for teachers.

The subjects were described as forty teachers and 1,258 pupils from forty sixth-grade classes in the Flint, Willow Run, and Ypsilanti public schools.

The specific procedures used in collecting the data were described, and the verbal instructions to pupils were illustrated.

It was decided that a description of the analysis of data, collected in this study, would have little meaning without a presentation of the results derived from that analysis. They are therefore presented together in the following chapter. It will suffice here to state that all statistical procedures, used in the analysis, are based on standard formulas.

THE SOCIOMETRY OF LEADERSHIP IN TEMPORARY GROUPS

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INTRODUCTION

Leadership is such a common phenomenon of experience and is so frequently spoken of that there is ordinarily little conscious awareness of the variety of social relationships the term embraces. A moment's thought, however, reveals the diversity of leaders and of leader-follower relations in the culture. Few words in the English dictionary have a greater variety of meanings than does the verb "to lead".

In its dictionary sense, however, leadership is usually defined, in what might be called a social-dynamic sense, as "the exercise of authority and influence." But there is almost general agreement in the psychological literature of the last few years that the exercise of authority and influence varies qualitatively as the group-dynamic relations between the influencer and the influenced vary from rigid to more free structuration. Cowley (2) drew attention to such a distinction by differentiating headmen from leaders. Pigors (12) differentiated between these two forms of social influence by defining as domination that "process of social control in which accepted superiors assume a position of command and demand obedience from those who acknowledge themselves as inferiors in the social scale, and in which, by the forcible assumption of authority and the accumulation of prestige, a person (through a hierarchy of functionaries) regulates the activities of others for purposes of his own choosing." Many observational studies have confirmed the need for this kind of distinction with consequent restriction of the definition of leadership. Anderson (1), studying the social behavior of young children, distinguished dominative from integrative modes of behavior. The former involved the use of commands, threats and attacks on the personal status of the individual; while the latter entailed explaining the situation to the other person, and by means of this, getting voluntary co-operation. Steward and Scott (14), observing the behavior of a herd of goats, reported that there was no more than chance correlation between leadership and dominance. They suggested, in fact, that these two phenomena are the result of two separate learning processes which are not associated. They pointed out also that their results agreed with similar experiments done on human subjects (e.g. Anderson) and that it was therefore possible to conclude, tentatively at least, that the lack of correla-

tion between dominance and leadership is a general phenomenon independent of cultural factors.

In the more restricted sense required by this differentiation leadership is best defined, by Pigors, as "a concept applied to the personality-environment relation to describe the situation when one, or at most a very few, personalities are so placed in the environment that his or their will, feeling, and insight direct and control others in the pursuit of a common cause (12)." Leadership is, then, to be understood as rather more than taking initiative, planning and organizing, as more than a positional relationship. Leadership implies a particular dynamic relationship between the leader and his followers. The chief characteristics of this relationship are: (a) an influence hierarchy; (b) integrative, co-operative behavior; (c) mutual interaction and stimulation; and (d) the absence of a fixed social structure which maintains an individual's status in this hierarchy after he has ceased to perform the functions upon which the status originally rested.

One further distinction, employed in this report, is that between the leader of a group and that person who may be called (following R. B. Cattell) its socio-center. The latter term is used to fit the general terminology of Moreno (11) from whose work it derives. Jennings (7, 9), in particular, has done a great deal of very significant work in the field of leadership using the techniques of sociometric choice. By this method, however, the most chosen individual or the person who has highest "choice-status" is, by definition, a leader. It will, of course, sometimes be the case that this "leader" will also meet the criteria of the definition of leadership advocated above. But there is no reason why this should always be so. Thus it seems desirable to call this most chosen person a socio-center and to leave open to investigation the relation between the roles of socio-center and leader. A further advantage of this terminology is that socio-center and "isolate" are more logical opposites than are Jennings' leader and isolate. The terms leader and follower may then be counterposed in such a way that both represent distinct but related social roles. The isolate is not necessarily, of course, a follower, any more than the socio-center is necessarily a leader. It is one of the objects of this report to examine the relation between sociometric choice-status and leadership in temporary groups of men.

Before this may be done, however, there is a further concept, introduced by Jennings (9), which requires exposition and testing. This is the distinction between socio-groups and psyche-groups. Socio-groups are defined (ibid.) as those "where sociometric structure is based on a criterion which

is *collective* in nature." Thus sociometric choice based upon the criterion of wishing to work in a common unit defines a socio-group. On the other hand psyche-groups are those "where sociometric structure is based on a strictly private criterion which is totally personal in nature." Associating or indicating a desire to associate in leisure time is such a criterion. Further, it is suggested by Jennings (*ibid.*) that "the tele between persons in respect to collaborating with one another in socio-groups may be called sociotele," and "the tele between persons in respect to associating with one another in psyche-groups may be called psychetele, since it is founded upon response towards associating or not associating with others in a purely personal matter, and concerns no situation common to all the members." Jennings has contended that there is very little overlap between these two groups, that there are few common choices by any individual on psychetelic and sociotelic bases. This contention has been submitted to a preliminary experimental test in temporary groups.

THE PRESENT INVESTIGATION

In the course of a comprehensive study of group behavior and of the emergence of leaders in small temporary groups of men (5)[1] an investigation has been made of the degree of overlap between socio-groups and psyche-groups and of the extent of correlation between sociocentral and leadership status. For the purpose of the larger study small aggregations of ten men were brought together in a particular way, under certain controlled conditions. These individuals were motivated generally to cooperate by the offer of financial rewards and by their needs to fulfill requirements of study courses, as part of which participation in this program was required. Men were allocated to aggregations, as nearly as possible, on the basis of their being unknown to one another, but with no other criterion of selection. Each aggregation was directed to a variety of activities so chosen that they found interaction expedient or essential and so formed a group. Ten such groups were established among male students of psychology classes at the University of Illinois and twenty among male candidates of the Air Force Officer Candidate School at Lackland Air Force Base.[2]

Each of these groups met in three three-hour sessions. This was necessary in order to have the group in existence long enough for leadership to emerge and for the members to become aware of the group as a functioning unit. It was necessary that each session be of sufficient duration to permit participation in a number of different activities and that there be a sufficient number of sessions to permit variation of the leadership structure. The design was such that in the first session leadership was left unstructured completely. It was a "leaderless" session, and the only leadership present was that which occurred spontaneously in the group. Where the group did not, of its own accord, reach the conclusion that a leader would help in planning the second session, it was suggested to them, at the end of session one, that they might select a leader for session two. When they reported for the second session an opportunity was given to reconsider this leader-choice and to elect another leader if they cared to do so. Whether this offer of change was accepted or not, another similar opportunity was offered about halfway through session two. Again, at the conclusion of this session the group was offered a change of leader in that it was asked to select a leader for session three. At the beginning of the third session a reminder was given concerning this choice and the person so chosen was then directly addressed and told that he was the leader and that he could use that office as he saw fit. Throughout session three the experimenter dealt directly with this leader in a way that had been carefully avoided up to that time.

Within this structural framework each session was planned to include a varied program of activities so that situations would occur characterized variously by demands upon: (i) cognitive abilities; (ii) social skills; (iii) special interests; (iv) group cohesion; (v) previous leadership experience, etc. Detailed descriptions of these activities and of the many measures made of: (a) personal characteristics of members; (b) inter-member relationship patterns; (c) physical equipment; and (d) the behavior of the group as a group need not be given here.

Both to gather information to be used in a study of syntality correlates of leadership (5) and to explore the foundations of some of the findings of Jennings (8, 9) a number of sociometric questions were put to participants of this program as each separate activity was completed and at the end of each session. Thus among some fifteen questions to be answered after each session were placed one (sociotele) which asked each participant to indicate those members of the group he would like to have remain in the group for future repetitions of the particular activity, or for other similar

activities, and also to indicate (by circling a number) those members he would prefer to have allocated to another group; and another (psychetele) by which participants were asked: "If you were to choose personal friends from among this group which members would you choose?"

With the object of casting some light on problems already raised implicitly in what has been said above, two other questions of the general sociometric type were put to participants. After each session participants were asked a question designed to discover their judgments of behavior influencing the group. This question was: "Some groups are so closely knit that the removal of any one person changes its complexion. For which persons, if any, in this group, would this be the case?" Further, in the second and third sessions, during which they were more or less aware of leadership, at the conclusion of the construction situation participants were asked whom they would judge to have been leaders in this situation. This activity of constructing a wooden model was chosen as the vehicle for this question because it was known to involve several difficulties, was expected to afford a good opportunity for leadership to occur, and since it was an active participation task, rather than a verbal one, it was anticipated to be one in which leadership could be relatively reliably judged both by independent observers and by participants. While this latter expectation was realized the former was not. This situation did not reveal a great deal of leadership but what was revealed was reliably rated. Thus, while it did not turn out to be the best situation for this question, it was not the worst choice for the purpose. Experience with student groups, however, led to a slight re-wording of this question and its re-location at the end of the final session.

DISCUSSION OF RESULTS

(i) *Socio-group and Psyche-group*.

One test of Jennings' claim that there are, in a group, few common choices based upon social, common criteria and purely private criteria, may be made by examining the extent of overlap of socio-centers based upon the sociotelic and psychetelic questions quoted in the previous section. Upon examination of the distribution of choices based upon each question, it was found that their shapes suggested the normal curve and that six or more choices in each group of ten men would conveniently define a socio-center. Since the assumption of normality seemed justified and the criterion choice score determining a socio-center was so chosen as to divide the distributions near their medians, the tetrachoric correlation coefficient has

been chosen as an adequate index of the relation between any pair of choices.

First, as an indication of the reliability of the sociometric test, choices indicated on the sociotelic and the psychetelic questions respectively, were compared from one session to another. In particular sessions two and three were chosen for this purpose on the assumption that by this time members had some knowledge of one another. (See Table I.)

For the sociotelic question the tetrachoric correlation coefficient between sessions two and three was $0.78 \pm .09^3$ for the ten student groups and $0.66 \pm .075$ for the twenty O. C. S. groups. Similarly choices made in response to the psychetelic question, concerning choice of personal friends, in the two sessions were corrected and the coefficients were $0.78 \pm .09$ for the student groups and $0.80 \pm .06$ for the O. C. S. groups.

Tetrachoric intercorrelation of choices for the psychetelic and sociotelic questions could not be calculated for session two with student groups since no persons were chosen on a psychetele basis who had not been chosen on a sociotele basis. In this session with the criterion mentioned, there were 75 socio-centers on a sociotele basis. There were but 34 socio-centers on a psychetele basis and every one of these was included among the sociotelic socio-centers. Using the notion of common elements (10) a coefficient may be estimated at 0.67. This situation was almost duplicated in the third session with student groups where there were 60 sociotelic socio-centers and 44 psychetelic socio-centers of which 38 were common. This situation gave a tetrachoric correlation coefficient of $0.70 \pm .10$. With the O. C. S. groups in session two r_{tet} for these two sets of socio-centers was again $0.70 \pm .07$ and in session three r_{tet} was $0.81 \pm .05$.

These two sets of data confirm Jennings' (9) claim that "the structures built by sociotele are in general larger in size (quantitatively 'take in' more individuals) than the structures built by psychetele." On the other hand, since the correlations between sociotele and psychetele choices are comparable with the "reliability" coefficients of the sociometric tests, it must be concluded that Jennings' claim of "very little overlap" is not confirmed.

The significance for this comparison of the temporary nature of the present groups is not known. It would be a reasonable guess that as individuals came to know each other in more detail there might be less overlap between sociotelic and psychetelic structures. But it is interesting that within the narrow confines of this study the degree of overlap *increased*

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[3] The figure given thus in each case is the standard error of the appropriate tetrachoric coefficient when both dichotomies are at the medians. Since some variation from median sectioning does occur this figure is approximate only.

between the second and third sessions, from 45 per cent to 50 per cent for students and from 50 per cent to 66 per cent for officer candidates.

In attempting any interpretation of these findings it must be remembered that these were relatively small homogeneous groups observed over the period of group formation. As group self-consciousness increased and the group members perceived the group as acheiving something, positive group feeling increased and this may well be a common factor in determining both sociotele and psychetele choices. Further, preparedness to accept an individual as a personal friend on short acquaintance is different from the actual designation of friends after longer association. But it is difficult to assess the force of accidental situational factors and of opportunity in the long-term choice of friends, and consequently it is not possible to choose between these criteria in the determination of the overlap between socio-group and psyche-group. On the face of the evidence here presented, in temporary, traditionless groups, at least, there is considerable overlap between sociotele and psychetele choices. It would still be true as Jennings (9) contends that "the psychetele pattern of a social atom cannot be predicted from its sociotele pattern," though it might be anticipated that such prediction would be a possibility if the sociometric test could be modified to respond more sensitively to differences in degree of feeling.

(ii)   *Leadership and Sociometric choice-status.*

The primary concern of this study, however, is with the sociometric conception of leadership. Jennings (8) claims to have shown that prominence and choice status in the socio-group are a "reflection of demonstrated capacities to affect favorably the social milieu of the group." Choice status in the psyche-group is apparently less closely associated with behavior influencing the group but represents rather "capacities to 'accept' the milieu of the group." (9). In either case "leadership" and choice-status are identified and the inverse of leadership is isolation. Jennings says those persons who are much chosen are leaders because they "count," because they "set the tone for the group in large measure." Some of them, she says, "may function chiefly as steadiers or moral support for the others, some may lead in ideas and activities, and some may be wanted on account of a special aptitude." And again (9) she writes, "While the varieties of styles of leadership (and of isolation) are many, nevertheless a number of characteristics of leader individuals stand out as common attributes. The social milieu is 'improved' from the point of view of the membership through the efforts of each other. Each widens the area of social participation for others

(and indirectly his own social space) by his unique contribution to this milieu. Each leader seems to sense spontaneously when to censure and when to praise and apparently is intellectually and emotionally 'uncomfortable' when others are 'left out', and acts to foster tolerance on the part of one member towards another." A footnote recognizes that other patterns of behavior are also found among leaders.

The point here is that, on this purely verbal level, Jennings' description appears to characterize leaders as defined in this paper as well as she claims it describes leaders by sociometric choice, i.e. socio-centers. As the writer interprets Jennings, she first meant that the much chosen individual, the socio-center, affected the group milieu because, by virtue of her choice position, she provided telic linkages with other group members. If one can think of direct and indirect influencing behavior, this would be relatively indirect. But Jennings also ascribes direct influencing to these socio-centers and thus suggests an hypothesis of some identity between them and leaders as rated by external observers using the definition of this paper. One may hypothesize also some identity between socio-centers derived from the socio-telic and psychetelic questions already examined and those derived from additional questions which imply influence and leadership criteria.

(a) *Leadership ratings compared with sociotelic and psychetelic choice.*

The first of these hypotheses has been examined by comparing sociotelic and psychetelic sociocentrality with leadership ratings for the sessions as a whole. These criterion ratings have been obtained by regarding as leaders only those group members who were "chosen" for leadership in a majority of situations in all sessions by both of the non-participant observers. Estimates of the reliability of these ratings have been made in two ways. First, inter-observer correlations have been calculated session by session for each group. These have been found to be 0.92, 0.77, 0.74 for the student groups in successive sessions, and 0.60, 0.60 and 0.68 for the O. C. S. groups in corresponding sessions. Second, for O. C. S. groups observer identifications over the whole period have been correlated and a coefficient of 0.80 has been obtained. This latter figure is the best available estimate of the inter-observer consistency which constitutes "reliability" for this criterion rating. Again tetrachoric correlation has been used since the assumptions of normality of the traits are quite well met here.

The correlations are as set out in Table II. Between rating as a leader and sociotelic choice r_{tet} is found to be $0.20 \pm .16$ in session two and $0.36 \pm .15$ in session three for student groups; while for O. C. S. groups

the corresponding values are $0.40 \pm .10$ and $0.59 \pm .08$. The suggestion, inherent here, that the coefficient tends to rise between the second and third sessions, may have very considerable significance for Jennings' contentions. While, at this stage of mutual knowledge, there is little similarity between sociotelic choices and leader ratings, it may be that the two become more alike as group members become more familiar with each other.

Correlations between psychetelic choice and leader ratings are found to be $0.32 \pm .15$ and $0.41 \pm .14$ for student groups in sessions two and three respectively. Again, the corresponding coefficients for the officer candidates are $0.46 \pm .09$ and $0.45 \pm .09$ respectively. The suggestion of increasing correspondence just noted for sociotelic choice is not present here for psychetele. Whether sociometric choices or ratings of leadership by non-participating observers most nearly indicate "true" leadership cannot be told; but it must be recognized that they are not, in this study at least, representing the same things.

(b) *Leadership Ratings compared with Sociometric "Influence" choices.*

Further light on these facts is obtained from participants' responses to the "influence" question included in this investigation. As indicated earlier participants were asked a question designed to get at judgments of behavior influencing the group "milieu." This question was: "Some groups are so closely knit that the removal of any one person changes its complexion. For which persons, if any, in this group would this be the case?" After an examination of the distribution of identifications ("choices") on this question the socio-center criterion score was set at five choices or more rather than five plus, as it had been for the more directly sociometric questions. The nature of this question was evidently such as to encourage fewer identifications than did the two questions discussed above, in spite of the fact that an individual was himself available for identification on this question in a way that he could not normally be for the other questions.

The tetrachoric correlations between identifications on this milieu-influencing criterion and leadership ratings are, for student subjects $0.88 \pm .06$ in session two and $0.86 \pm .06$ in session three. Officer candidates yield coefficients of $0.80 \pm .05$ for session two and $0.77 \pm .06$ for session three. These coefficients are considerably and statistically significantly different from the values, given in sub-section (a) above, of the correlations between leadership ratings and sociotelic and psychetelic choices. This fact suggests that participants in a group do recognize and can identify those members who primarily determine group behavior and group atmos-

phere but they do not necessarily choose these persons to be members either of a socio-group or of a psyche-group.

(c) *"Influence" identifications versus sociotelic and psychetelic choices.*

Identifications based on the "influence" question have been correlated (tetrachoric) with sociotelic and psychetelic choices. For student data this analysis was made for the third session only. It is found that r_{tet} for the sociotelic choices and "influence" is $0.53 \pm .13$ and that for the psychetelic choices is $0.30 \pm .15$. For O. C. S. groups a more complete analysis was made and there tetrachoric coefficients for the sociotelic choices and influence identifications are $0.38 \pm .10$, $0.46 \pm .09$ and $0.65 \pm .075$ respectively for the three sessions. For psychetelic choices and influence identifications the coefficients are $0.54 \pm .09$ and $0.64 \pm .075$ for sessions two and three respectively. (See Table III.)

The implication of these data would seem to be that in the minds of group members in a program of this nature socio-centers whether based upon sociotele or psychetele are not identified with those persons who are recognized as "counting" and as most affecting the group "milieu." Since in sub-section (b) above some evidence has been presented to suggest that participants responding to this "influence" question do identify "leaders" as they are identified by non-participating observers, the evidence of this section indicates that *socio-centers are not necessarily leaders*. Certainly these two concepts are not coincident.

On the other hand, the consistent tendency for these coefficients to increase as the period of association increases does suggest that there may be a tendency towards Jennings' notion that in a larger, well-established group, the sociotelic and psychetelic questions identify leaders well enough. This hypothesis gives rise to the question whether there may be found some systematic shift over these three sessions. (Do the leaders become the socio-centers or do the socio-centers become the leaders?) The data have been examined from this point of view and it is found that the tetrachoric "reliability" coefficients of the three questions concerned are as given in Table I; and the respective correlations with leadership ratings are as given in Table II.

These data suggest somewhat great consistency for the "influence" question and indicate that this question identifies leaders earlier and more consistently than either sociotelic or psychetelic questions. One implication of the figures might be that the people who "count" by their influencing the group milieu tend to be chosen more readily as work companions (socio-

TABLE I

RELIABILITY COEFFICIENTS[1] FOR SOCIOMETRIC QUESTIONS

		Sessions compared			
Question		20 Officer Candidate Groups			10 Student Groups
		I - II	I - III	II - III	II - III
A.	Sociotelic—Future working together	.45	.50	.66	.78
B.14.	Psychetelic—Personal friends	0[2]	0[2]	.80	.78
B.6.	Influence	.77	.64	.83	.78

1. Tetrachoric coefficients with sectioning at the median.
2. This question was not asked in session I since time had scarcely been sufficient to form judgments concerning the friend potentialities of members.

TABLE II

CORRELATIONS[3] BETWEEN SOCIOMETRIC CHOICES AND LEADERSHIP RATINGS

Question		20 Officer Candidate Groups Session			10 Student Groups Session	
		I	II	III	II	III
A.	Sociotelic—Future working together	.44	.40	.59	.20	.36
B.14.	Psychetelic—Personal friends	0	.46	.45	.32	.41
B.6.	Influence	.77	.80	.77	.88	.86
B.15.	Leaders as judged by participants	0	0	.80	0	75[4]

3. Tetrachoric coefficients.
4. Construction situation only.

tele) when their influence is recognized and when the group settles down to working together in a more matter-of-fact way. Examining the several choices and identifications group by group suggests that the increasing coincidence is due largely to a general shrinkage of the number of socio-centers on sociotelic and psychetelic criteria, in which the "influencing" persons tended to retain their choice-status better than others. There is nothing here to suggest why this should have occurred, though one might hazard a guess that participants may have become increasingly aware of the experimental interest in leadership in the study and may have en-

deavored to make their own records "look better" by choosing only those whom they expected the observers would also choose on quite different criteria. In other words, there is a possibility that choices became less genuine. "Reliability" coefficients, however, offer no support to this hypothesis.

(d) *Leadership judgments of participants and observers.*

As already indicated, participants in the student groups were asked, at the conclusion of the construction situation in both the second and third sessions, whom they would judge to have been leaders in this situation.

The analysis of data derived from this question must begin by noting that in some 30 per cent of cases the respondents replied that there was no leadership. This may be contrasted with the fact that the observers never agreed that there was no leadership in the construction situation. However, when the remaining participants' recognition of leadership is correlated with observer ratings the coefficient obtained is $0.75 \pm .10$. Further the correlation in the third session between choices on this question and those on the sociotelic question was $0.25 \pm .16$ and with those on the psychetelic question was $0.36 \pm .15$. Considering the brevity of this one situation these figures are consistent with the finding (see Table II) that these sociometric choices are correlated with the leadership ratings of observers, in the same situation, 0.36 and 0.41 respectively.

O. C. S. groups were asked, at the end of the third session, to identify the leaders for the whole session. Bearing in mind the leadership design of this session, which was to have one leader throughout, it is necessary to comment here that this never occurred in practice. Though there was this designation of an official leader, and thus, of the elements of an "official" influence structure, this was quickly forgotten in the course of the group's activities, and leadership was determined by the relation between group needs and individual ability, as much in this session as in either sessions one or two (cf. 4, 13). The distribution of "choices" on this question was such that five or more "choices" were taken as indicative of leader selection by participants. The corresponding criterion among the ratings was agreement between the two observers. With these criteria and for this session observers' identifications of leaders varied from two to seven in any one group, while participants identifications ranged between three and six. The tetrachoric correlation between the two sets of identifications is $0.80 \pm .05$.

For these groups, and for this third session, the correlation between the sociotelic question and the identification of leaders was $0.59 \pm .11$; and for the psychetelic question r_{tet} was $0.65 \pm .10$. In this case the comparison

of these coefficients with the corresponding correlations with observer
ratings, reveals that for sociotele the results are identical. For psychetele
the association with participants' leader identifications is considerably closer
than that with observer ratings.

In Table III have been drawn together the coefficients of correlation
between the sociotelic and psychetelic questions and all the other identifica-

TABLE III

CORRELATIONS BETWEEN SOCIOTELIC AND PSYCHETELIC CHOICES AND OTHER FORMS OF
LEADER IDENTIFICATION

A. Student Groups	Sociotelic Question Session			Psychetelic Question Session		
Identification	I	II	III	I	II	III
Observer ratings of leadership (overall)		.20	.36		.32	.41
"Influence" question			.53			.30
"Leaders" in construction			.25			.36
B. O.C.S. Groups						
Observer ratings of leadership (overall)	.44	.40	.59	*	.46	.45
"Influence" question in appropriate session	.38	.46	.65	*	.54	.64
Leaders in session III			.59			.65

tions made in this study. Viewed in contrast with the last two rows of
Table II, this would suggest that "leadership" is not identified in the minds
of participants with either socio-group choice or psyche-group choice and
further question is cast upon this common sociometric identification. When
asked simply to indicate leaders, without being given any definition of lead-
ership for the purpose, participants did so with a fair degree of validity—
.80 if observers' ratings can be regarded as a criterion of leadership. This
would, in fact, tend to reinforce any argument that observers' ratings
may be regarded as such a criterion and that socio-centers are not neces-
sarily leaders.

(e) *"Status-scores" and Leadership ratings.*

Recently French and Eng (3) defined "status-scores" in terms of the
number of choices received minus the number of rejections received on a
sociometric test. Using these scores French and Eng found a number of sig-
nificant correlations with leadership behavior. Since data was readily at

hand in part of the present study to examine this status-score against a different, and rather more stable, criterion of observer ratings, this was done for student groups, for status-scores derived from the sociotelic question.

The distributions of status-scores, for both leaders and non-leaders, approximate normal, so that again tetrachoric correlation has been used as an estimate of the relation. The coefficient obtained has a value of $0.44 \pm .14$ which compares well with results reported by French and Eng for sociogroup scores with such categories of behavior as dominance, generosity, fairness, purpose, etc. The present finding, however, but slightly favors these "status-scores" over the more usual "choices". The size of the correlation coefficient is still so small as to indicate that "status-scores" and leadership ratings have little variance in common.

(iii) *The Value of First Impressions.*

(a) *"First Impression" and Psychetelic Choice.*

As already indicated above sociometric questions were also asked after each specific situation was completed. The first situation of the first session was usually construction, but sometimes a situation known as "group judgment" in which the group was asked by discussion to derive answers to several questions of fact. In either case the situation took no more than fifteen minutes to complete, and these were, of course, the first fifteen minutes of acquaintance. At this stage participants were asked to indicate the two members of the group they liked most because of the kind of persons they appeared to be and also the two liked least. Since participants were, in general, previously unknown to one another, the responses to this question at this time must therefore have represented first, or very early, impressions. Consequently it has been of some interest to correlate these responses with the indication of willingness to choose friends within the group, made at the conclusion of the third session, that is after some ten hours of formal association, probably longer when casual meetings coming to the group and leaving the building are considered.

The relation between the two sets of responses has been estimated by tabulating friend choices and not-friend choices against most liked, not mentioned and least liked. Both of these distributions may be conceived as really normal. Therefore a tetrachoric correlation coefficient may be regarded as a more appropriate summarizing statement of the relation than a contingency coefficient would be. Thus the "not-mentioned" category has been thrown first to one side, then to the other, and two tetrachoric coefficients found.

For the 10 student groups these two coefficients agreed very closely, the one being 0.30 and the other 0.28. Since the number of judgments upon which this calculation is based is approximately 900, this is a highly significant value and is consistent with the value of $P < .001$ obtained by the chi square test.

The 20 O. C. S. groups give tetrachoric coefficients of 0.31 and 0.45 (average $r_{tet} = .38$) for the correlation between first impression and choice of friends. This again is highly significant.

The significance of these values does not mean, of course, that this correlation coefficient is high. It cannot be said that first impression is a close function of final willingness to choose friends or vice versa, but there is a considerable relation between them.

(b) *"First Impression" and Leadership ratings.*

It is to be expected that these first impressions would bear less relation to leadership ratings than to friend choice since the latter was made by the same individuals on much the same criterion. Nevertheless, it was thought worthwhile to investigate the correlation between first impression and leadership rating. The procedure was exactly as for the previous comparison.

Chi square was again significant at or beyond the .001 level. Again, tetrachoric correlation has been used putting scores of the "not-mentioned" category first with "most liked" and then with "least-liked". For student groups, in the first case the coefficient given was 0.20 and in the second case 0.10. Regarding the mean of these as a summarizing coefficient the value is 0.15 which is significant at the .01 level. Corresponding values of the coefficient for O.C.S. groups were 0.10 and 0.25 respectively. The summarizing value in this instance is thus 0.17 which is again statistically significant.

These results indicate that there is no close relation between ultimate leadership in a small temporary group and making a favorable impression very early in the group's association. On the other hand, the correlation is significantly positive and thus suggests that something of leadership has already emerged when a first impression is recorded.

SUMMARY AND CONCLUSIONS

Small temporary traditionless groups, each of ten men, have been formed for the purposes of experimentation with factors associated with emerging leadership. Ten such groups were composed of male stu-

dents at the University of Illinois and twenty of male O.C.S. cadets at Lackland Air Force Base. Among the many aspects of group and group-member behavior which has been observed and assessed by non-participant observers, ratings were made of the leadership behavior of each participant. These ratings have been based upon a definition of leadership as an inter-individual relation of influence, voluntarily accepted by the influenced person, in which leader and follower mutually stimulate one another and in which the relationship is not maintained beyond its mutual usefulness by a rigid social structure.

At the same time participants have completed a number of socio-metric "tests" in which both sociotelic and psychetelic choices have been called for, among other specifically introduced here. Relations among these sociometric tests and between them and leadership ratings have been examined. Centrally, the relations between the sociometric definition of "leader", (or what has here been called "socio-center") and the "influence" definition employed in the observer ratings, and in two of the introduced sociometric devices, have been examined.

Both sociotelic and psychetelic types of sociometric test have a session two-session three reliability coefficient in the range 0.72 to 0.78, the psychetelic choices being rather more consistent. The introduced "influence" question had a reliability of approximately 0.80. Intercorrelation between sociotelic and psychetelic choices was approximately 0.70.

The correlation between sociotelic choice and leadership ratings is shown in Table II from which it may be seen that a value of approximately 0.45 will represent this relation. Similarly the correlation between psychetelic choice and leadership ratings may be said to be approximately 0.42. The implication is that these two concepts, while overlapping, are not identical.

When participants were asked a sociometric question which implied the "influence" criterion, correlation with observer ratings of leadership was approximately 0.80. And when participants were asked directly whom they regarded as having been leaders, the correlation with observer ratings was again 0.80. But this same question correlated only 0.25 and 9.36 with sociotelic and psychetelic choices respectively, for student groups; and 0.59 and 0.65 respectively for O.C.S. groups. Despite these slightly higher values for O.C.S. groups it seems safe to conclude that sociotelic and psychetelic choices are not identified in the minds of participants with leadership.

The correlation between leadership ratings and socio-group "status-

scores", as defined by French and Eng, was examined in ten groups, and found to be 0.44. The indication is that these two have little variance in common and that these status-scores are not superior to sociotelic choices in their correlation with leader identification by external observers.

Another form of sociometric question has been used to study the value of first or early impressions. It was found that correlations between first impression and final willingness to choose as friends, and between first impression and leadership ratings, are so low as to indicate that there is no close relation between these. But the fact that these coefficients were significantly positive may suggest that something of the value one individual has in the eyes of another, which must partially determine his leadership status, is already evident at the stage of a first impression.

In drawing conclusions from this study, it must be remembered that these were temporary, artificial and traditionless groups; and that this quality alone may be sufficient to explain what differences there are between these findings and those of the sociometrists, particularly Jennings. Nevertheless, there can be little doubt but that real groups have been formed here and that data derived from them may have real significance in understanding the dynamics of more well-established groups. In a sense this has been a group embryological study which can illuminate the dynamics of formed groups much as embryology contributes to the study of anatomy and physiology.

Some of the sociometric findings are clearly confirmed. For example, it is clear that structures built by sociotele are more inclusive than those built by psychetele. On the other hand, the sociometric concept of leadership as roughly identical with sociocentrality is brought under fire. The evidence suggests that leadership defined in terms of influencing behavior cannot be measured by sociometric tests using either sociotelic or psychetelic criteria. The fact that participants (for whom leadership was not defined) identify "leaders" in a closely similar way to observers (for whom leadership was defined as a voluntary influencing relationship) indicates that this definition does no violence to common sense and that, in fact, this is the relation which is generally conceived as that of leadership. Further, the lower correlations between these identifications and the sociotelic and psychetelic choices is indication enough that, in the minds of these participants, they were not choosing leaders in making those choices.

An additional fact is that participants in responding to a question, in which the influence criterion is implied, but not stated and in which the notion of leadership is not introduced, did identify leaders much as

did external observers. The implication of this fact is that the sociometric technique is applicable to the identification of leaders but that sociotele and psychetele are not adequate criteria.

Finally, and in summary, it may be said that participants in such groups as these understand the relation of leadership and that if adequately questioned they can identify leaders in the group with both reliability and validity.

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THE USE OF PSYCHODRAMA, SOCIODRAMA AND RELATED TECHNIQUES IN SOCIAL PSYCHOLOGICAL RESEARCH

A PROSPECTUS FOR RESEARCH

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I

A notable development in social psychology, probably as old as the field and yet only recently receiving adequate attention, is psychodrama, sociodrama, and the various *action techniques*.[1] The import of these techniques is more manifest in practice than in the literature of sociology and psychology. Throughout the country psychodrama and the related techniques are being used in schools more and more extensively in teaching and in solving of problem situations. Dr. J. L. Moreno, the founder and leading authority on these techniques reports that a great proportion of mental institutions, possibly one-third, are now using psychodrama as a technique for therapy. The validity of psychodrama as a clinical technique is being demonstrated not only in cases of neuroticisms, problems of home, job, race and religion, but also in cases of mental disorders abandoned by psychiatrists as incurable by reason of the virtual impossibility of establishing communication with the patient.

It is beyond the scope of the present paper to give a complete description of psychodrama and its various manifestations and ramifications.[2] However, it is necessary for analytical purposes to describe a few of the orientation points.

The Psychodramatic Theatre

The psychodramatic theatre differs from the conventional theatre on a number of scores. The stage of the former is circular with three step levels at the perimeter. Such a stage permits additional mobility by making it possible to enter or exit the stage from any direction. Further,

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[1] The concept *action techniques* is used here in the sense accepted by sociometrists. Such techniques are those of rôle taking, rôle playing, and rôle creating which imply "acting out."

[2] For further and more complete description see:

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such action as strolling, walking, or running can be carried out at the periphery. This additional mobility is especially evident when the action is that of persons incidental to the central production which may be going on at the center of the stage. The steps serve many additional purposes, as for example, providing informal seating where the director may carry out an interview. Where possible, a balcony is set behind and above the stage. The balcony permits mobility in the vertical sense. The person who is supposed to be in a high place, or the person who is symbolically in a high position (e.g. takes the rôle of being God or of being in heaven) may use the balcony to aid such portrayals. Behind the stage there are two wings, one serving as an exit, the second serving as storage space for props which might be needed in any given production. The props are tables, chairs, pillows, and other items which facilitate the construction of physical situations, but they are not scenery in the usual sense. The recording equipment is usually located in the wing used for exit purposes. Microphones with leads to the wire recorder are suspended above the stage and above the audience. The seating for the audience is set before the stage, but may extend around it. Space is left between the seats and the stage to allow mobility, and the seats are so arranged that members of the audience may have easy access to the stage, and so that the director may have easy access to the members of the audience.

It should be noted that the psychodramatic theatre is to be construed as one setting ideally devised for the carrying out of psychodrama, sociodrama and the various *action and group techniques*. It is more practical in many cases, however, to carry out the various techniques in the classroom, home, park, or playground.

Psychodrama and Sociodrama

The operations involved in the psychodrama and sociodrama vary greatly with the situation. The most general pattern, however, is in (a) the *warming up* period, (b) the production and (c) the discussion. The number of persons necessary at any meeting is arbitrary, but there are some obvious limitations. The psychodrama may involve only the director and the protagonist (main actor or central figure), or on the other hand, it may involve the director, the protagonist, a staff of trained auxiliary egos, people actually involved in relationships with the protagonist, and an audience which may provide other (untrained) auxiliary egos. The sociodrama is initially limited in that it necessitates an audience. The focus of the psychodrama is usually around one person, and the production brings

out aspects of the person's life situation, real and imagined. The socio-drama is oriented around a problem, usually defined by the audience, the audience participating in the production to clarify the problem as it is meaningful to them.

In terms of the operations, probably the key words to be considered are "acting out," acting out of the prescribed rôles, imaginary rôles, experienced situations, constructed and imaginary situations, dreams, etc. This is done on the stage, under the director's supervision, generally with the aid of auxiliary egos, and before the audience.

The director's function in psychodrama is manifold. First, the director initiates and conducts the *warming up* process. If it is an educational demonstration, the director may begin with an introductory talk, indicating the purposes and ramifications of the techniques. As a part of the introductory talk he may ask members of the audience (individually) to identify themselves, their occupations, their interests in the present session, other persons present with whom they are acquainted, etc. From the information which is gathered in this way, the director is able to form a tentative *sociogram* of the relationships which exist at the beginning of the session. The questions asked are not necessarily routine questions of identification; rather, frequently questions are very personal, loaded, and at times even sound like accusations. Information which comes from the responding persons, thus, is not only the recounting of "facts" but also includes suggestive cues to the types of responses which may be expected. The director is not restricted to this afore-mentioned approach. He may choose randomly a person from the audience, invite the person to sit on the second step of the stage, and proceed in an informal interview. The audience is brought into participation by way of pauses in which the director explains what he is doing. If the director finds that for some reason the person being interviewed is not a good subject for a production, he may dismiss the person, explaining why to the audience,[3] and then begin with another subject.

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[3] A good example of a reason for dismissing a subject is as follows: If the person has come to the session with a close relative (father, mother, wife, or husband), experience has shown that the person will have great inhibitions and blocks against acting out situations other than those which involve the close relatives and in which the close relatives take their own parts. These inhibitions and blocks are strongly noticeable even in the audience. In one recent session a young man was acting out his family relationships in psychodrama. An auxiliary ego was needed to play the part of the wife. The young man set the criterion of choosing his

If the psychodramatic session is therapeutic, the type of *warm up* used is different from that utilized in the educational demonstration.   In the therapeutic session, while it is necessary for the patient to be aware of the purposes of the session, the *warm up* should not be of such a character that the emphasis is put on demonstrating the method; rather, in this situation, the empasis is in warming the patient up to the production.   In the therapeutic sessions the *warm up* may center about an interview of the patient, recalling previous sessions, bringing the patient (as well as the director and the audience) up to date in terms of the patient's own comprehension of the previous work.

The *warming up* process not only serves to introduce the director to the members of the session, but it also allows the members of the audience to become acquainted with each other, to respond to each other as social stimuli.   Again, those present identify themselves with the questioning situation and expect to be questioned, and generally become more prepared to be active participants in the session.

The second major function of the director is in "editing" the production as it occurs.   The director terminates the *warming up* period when he feels that the protagonist has been adequately chosen and that the situation is ready for the initiation of the production.   The first scene of the production is usually elicited from the protagonist.   That is, the protagonist is asked to choose a situation or an experience which best demonstrates his problem or the particular relationship introduced during the *warming up* period.   If the protagonist has difficulty in choosing a situation to portray, the director may suggest the initial scene on the basis of the information he has already gathered.

The action in the production may be "prepared" in the following sense. The protagonist is asked to take the necessary auxiliary egos into the wing and orient them to the situation he wishes to portray.   This however, is

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auxiliary ego wife to be the way the woman said "I love you." He suggested having the women of the audience say the phrase, but a particular young lady (who incidentally was very familiar with psychodramatic techniques and had worked with them previously) found it impossible to say the words. Her parents were present at the session, and although she understood the situation perfectly (and further indicated that she and her parents were on good terms) and her parents understood the operation of psychodrama, she was unable to utter the phrase. In the first type of *warm up* described above such a person would initially be discounted as a possible auxiliary ego or protagonist unless the production were to center around the person or the close relation.

not always the case, many productions not having the "preparation" (especially when highly trained auxiliary egos are available). When the protagonist returns with the auxiliary egos, he is asked to describe the setting. However, he is restricted in his description to using the first person and the present tense. A typical example of what might occur when the protagonist returns to the stage is as follows:

Director: You were gone a long time. Have you prepared the scene?

Protagonist: Yes, we're going to show how . . .

Director: (Interrupts) Don't tell us what you are going to do. Where are you?

Protagonist: I'm at home in California with my wife.

Director: In what room are you?

Protagonist: In the living room.

Director: Describe it for us.

Protagonist: The door from the kitchen is . . . (describes living room).

Director: Who is with you?

Protagonist: My wife was with me.

Director: Your wife *is* with you. Where are the children?

Protagonist: They're upstairs in bed. My wife and I are alone.

Director: What is your wife saying to you?

Protagonist: Well, she's telling me . . .

Director: (Interrupts) You take the part of your wife. What are you saying to your husband?

At this point the action has begun. In this particular case the protagonist has begun with the part of another, his wife. When the wife has finished the initial statement, the rôles may be reversed again, the husband is the husband, and the auxiliary ego takes the part of the wife.

As the action ensues, the director takes a position to the side of the stage, out of the action, but in position to terminate the action or initiate action. He may introduce additional action by reversing rôles, producing doubles, making the telephone ring, or by other techniques. When the director feels that the scene has gone far enough (i.e. is becoming repetitive, brings out no further information, becomes artificial or forced, etc.), he "cuts" the scene. After the scene has been terminated, the director may interview the protagonist, or he may, on the basis of cues which have been presented, immediately call for the next scene. We may extend the previous example to show how the second scene might be initiated.

Director: Cut! Thank you. (Dismisses the auxiliary egos and talks to the protagonist.) It is tomorrow morning. You are having breakfast. Does your wife make breakfast for you?

Protagonist: Yes she does.

Director: Where are you?

Protagonist: We're in the kitchen. We don't have a dining room.

Director: Describe it for us.

Protagonist: Well, here is the kitchen table, and there is the stove. It's a three-burner stove . . . (continues description).

Director: What are you doing?

Protagonist: I'm sitting here at the table eating my breakfast. (Sits) My wife is cooking at the stove.

Director: (Calling auxiliary ego) Wife! You are at the stove cooking.

Protagonist: Are my eggs ready? You *know* I like them to be just three minutes. (The action has begun.)

In the sociodrama the functions of the director are similar. However, in the sociodrama the focus is not on a protagonist, but on a topic which has been selected and defined by the members of the audience. In this case the director selects those persons who have been instrumental in choosing the problem and allows each of them to portray the situations in which the problem became meaningful to him. In this type of portrayal the soliloquy figures prominently, most persons identifying the situation of a problem becoming meaningful with situations of contemplation. An example of how the sociodrama may be brought to the level of action is as follows:

Director: Who voted for this problem? (Hands are raised. The director picks a person.)

Director: Will you come here to the stage please? (Protagonist moves to the stage. The director takes his hand and turns him to the audience.) What is your name?

Protagonist: James Frank. I'm a teacher.

Director: What do you teach?

Protagonist: I teach psychology at ———— College.

Director: When was the first time you became aware of this problem?

Protagonist: I don't know for sure. I believe I have always been aware of it.

Director: You were the one who suggested this topic initially weren't you

Protagonist: Why yes, I was.

Director: Was there some specific situation which involved this problem which happened recently?

Protagonist: Yes there is. I was coming home . . .

Director: (Interrupts) You are coming home. . . .

Protagonist: I am coming home from downtown. I am in a subway and it is late in the evening.

Director: What time specifically and what subway?

Protagonist: About 10:30 P.M. and on the B.M.T. going to Astoria.

Director: What are you doing? Are you alone?

Protagonist: I'm sitting and reading the paper. I'm in the last car of the train, and I am not aware of there being anyone else in the car.

Director: What paper?

Protagonist: The *Post*. I'm reading an article about atrocities committed by the North Koreans.

Director: What does the article say?

Protagonist: It says that a number of American soldiers who had been captured by the North Koreans had been found bound and shot.

Director: What do you do?

Protagonist: I read, and then I stop and put the paper down and think about the article.

Director: What are you thinking?

Protagonist: I am thinking that . . . (Goes into soliloquy.)

When the soliloquy ends the director asks a few questions about the action. What the person did then? Whether the problem had come up again? etc. He then dismisses the protagonist and begins with another member of the audience. By the time two or three persons have been called to the stage, the criterion of choice may have shifted from that of being one of the choosers of the problem to being a person with a problem in the same area. Generally, there is a surplus of persons who want to come to the stage and present aspects of the chosen problem as it is meaningful to them, but there is usually a time limitation which the director must consider.

Thus the director edits the scenes and the action of the production, taking his cues from the words and actions of the protagonist, but bringing to the situation the experience derived from previous sessions.

A discussion period follows the termination of the production. The psychodramatic techniques used may be analyzed in terms of the information which has been garnered. But more important, other members of

the audience are asked if, how, and why they identified with parts of the production. These reports may be taken as subject matter to continue the production using new protagonists (if time permits). The discussion, further, serves to give the director an opportunity to summarize and close the session.

Psychodrama, Sociodrama and Related Techniques as Diagnostic and Clinical Tools

Even the casual observer who sees but a few psychodramatic productions is impressed by them. A frequent expression is: "I don't know what it is, but there is something to it [the psychodramatic production]." The casual observer usually does not take the time to consider what the *it* is, but when some of the factors involved are pointed out explicitly, he is quick to recognize them. The suggestiveness of the techniques employed, aside from the production as a totality, is easy to demonstrate.

As the protagonist begins to act, it is possible for him to keep from revealing his innermost thoughts, feelings, and even some of his common ways of behaving. *But,* as the production progresses, as the situation becomes more involved and more explicit, the protagonist himself becomes more involved. His responses and the stimuli which he sends forth are related to his background of behavior and experience, and the cues and clues which these communicate are taken up by the trained auxiliary ego to further involve the protagonist in his own behavior. The manner in which the protagonist conducts himself reveals aspects of his personality in the situation which begin to identify him more specifically than any cliche classification of personality types. However, the protagonist does not merely act as himself on the stage. Other techniques are employed in the production which cause the protagonist to reveal further aspects of his personality. Techniques such as the *rôle substitute* technique (where a person acts out the part of someone else), or the *reversal of rôles* technique (where someone plays the part of the person and the person takes the part of another who is in relationship to himself) indicate not only the tendencies to behave in a given way, but also demonstrate how the person perceives the rôles and expectations of others. It is difficult for the protagonist to live a lie when these techniques are applied.

Other techniques which are used are equally suggestive. The mirror technique is one which may well make the observer marvel. An auxiliary ego acts out the part of the protagonist on the stage, while the protagonist sits in the audience and watches himself on the stage. Dr. Moreno, who has

conducted many hundreds of sessions, indicates that it is most frequent that a protagonist, declining to act his own part on the stage, will become so involved in watching his mirror image that he will rise up at a point and state, "That's not what I would do," and then will assume his own person on the stage in place of the mirror image to indicate how *he* would behave.

Again, another technique which is most revealing of the protagonist's personality is the use of the *double*. While the protagonist is on the stage, an auxiliary ego is assigned to take the same part as the protagonist. This occurs frequently when the protagonist is soliloquizing. While the protagonist may rationalize his behavior, or behavior of others, the double may make the comments, sometimes obvious, sometimes subtle, which involve motives the protagonist might not want to admit. As the double speaks, frequently the protagonist will answer the thought uttered by the double, admit, deny, supplement, disregard, or rationalize it. Whatever the response of the protagonist in the situation, the technique usually makes the protagonist more conscious of his own thought processes, or at least, makes his position more extreme and more evident to himself and/or to the observers as they watch him respond.

There are other techniques which are very important, but it is not the intention here to present them all or to demonstrate all the ramifications. Here the attempt has been merely to indicate some of the more obvious ways in which the techniques employed are impressive to the observer. It does not require great imagination on the part of the reader to see how such tools are most useful as diagnostic techniques.

Again, this paper is not a discourse on the clinical virtues of psychodrama and the related techniques; yet, it is important to be aware of the more general clinical ramifications. Probably the word which is most frequently associated with the clinical aspects of psychodrama is "catharsis". As the word is used, even today, it covers a multitude of sins, but probably it is best identified as the release of tension. The word itself is an old one, and historically it is identified with drama in the Aristotelian sense. As in the drama, there is catharsis in the psychodrama, sociodrama and the various action techniques, and probably to a greater degree. The audience is itself a part of the production, and identification with the actors and the situations is greatly facilitated. For the actors, who in each session act out different rôles and situations, catharsis is great.

As an extension of the few techniques briefly described above, it is evident that therapeutically the techniques involved are useful tools, not

only in making the individual define and understand his own behavior and the motives underlying it, but also in permitting a person to identify with the position and problems of others. In this manner, persons who may be completely egocentrically oriented in a situation may be able to take themselves out of their intellectual and emotional shells, and to see themselves *as only a part of an interpersonal relationship.* If clinical techniques are directed to enable one to face and solve his own problems rather than to authoritatively postulate solutions, the importance of these techniques in practice cannot be neglected.

Psychodrama, Psychoanalysis and Projective Techniques

Psychodrama, sociodrama, and the related action techniques make certain particular assumptions. At one point, psychodrama is at an extreme from the method employed in such different procedures as psychoanalysis and a test such as Rorschach's. While rapport is necessary in both Rorschach and psychoanalysis, the aim is such as to structure the situation so that the interviewer or analyst does not influence the situation. Such involvement might result in different answers to the card stimuli, or in the psycho-analysis to a shifting of the situation so that the analyst becomes the subject of his own procedure. To avoid this last possibility, in psycho-analysis the analyst usually places himself physically out of sight of the patient. In psychodrama and the related techniques, however, as Moreno has previously pointed out, there is no attempt to dissociate the individual from the relationships which might arise between the protagonist and the director, the auxiliary egos, or members of the audience. Rather, if such relationships should be established, the attempt is to utilize them. In this here is the basic assumption that personality is something that may exist only in terms of interpersonal relations, and only in specific situations. The objective is not, however, to try to get a protagonist involved in terms of the director himself, or the auxiliary egos themselves, although this occurs and becomes part of the situation. The attempt is, rather, to allow the individual to become involved in social relations with other persons, the auxiliary egos taking the part (at times) of the individuals who are known to the protagonist. It is essential to understand that in the final analysis there is an attempt to reconstruct the situation (in particular types of psychodrama) which are real to the protagonist, even to producing the actual persons with whom the protagonist is involved and shifting the locale of the production to that associated with the situation, be it home, industrial plant, or classroom. But the attempt does not end here! Re-

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construction is not always possible and it is not always fruitful. The objective in the techniques is also in the *construction* of situations which are equally real to the protagonist. If one wants to observe *how* a person acts, it becomes irrelevant whether the behavior under observation is reconstructed or new. The assumption underlying the various action techniques is useful, and it is certainly less of an assumption than the other extreme which postulates a personality as observable and even at times as existing in a social vacuum. It is at this point that the systematic research possibilities in personality using the action techniques have not yet been realized. Dr. Moreno and many others who have worked with the action techniques recognize that they do not permit easy "measurement" such as the authors and supporters of projective tests and other types of inventories might purport. This is unfortunate, but if it is unavoidable, it is not to be viewed as a detraction from the approach. Rather, this indicates that the action techniques require greater definition and specification, more accurate and comprehensive reporting, greater awareness of the variables involved, and more attention to the relationship to other approaches.

II

A Basic Area of Research

Theories of personality and the definitions upon which they are based have varied greatly.[1] It has been pointed out more than once that definitions of personality vary with the operations and needs of the researcher.[2] Many theories and definitions have been discarded or superseded by others which have been judged more adequate, and today a variety of definitions remain which are useful in their own contexts.

Modern systematic attempts in social psychology have tended towards such orientations as those of Mead and Moreno.[3] The definition of personality emerging from these orientations is twofold. Personality refers to:

(1) *the tendency of the (human) organism to respond in a given way in a given situation,* and

(2) *the organization of such tendencies.*

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[1] For one classification of definitions of personality see: Allport, Gordon W., *Personality, A Psychological Interpretation,* Henry Holt and Company, New York, 1937.

[2] For a recent statement of this point see: Kluckhohn, Clyde and Henry A. Murray, editors, *Personality in Nature, Society, and Culture,* Alfred A. Knopf, New York, 1948. (The two chapters written by the editors.)

[3] See for example: Newcomb, Theodore, *Social Psychology,* Dryden Press, New York, 1950.

Such a definition of personality focuses attention on the organism in its developmental life history and at the same time makes explicit the importance of the situational determinants of behavior.

It is not postulated that the above definition has reached any state of finality, since it is obvious that there is a direct interdependence between theory (in which the definition serves as the primary frame of reference) and research.[4]   The theoretical formulations indicate the needed research, and in the same way, research results indicate the need for modification of theory.   On the basis of such a definition, systematic approaches to social psychology are formulated.   In reading the various social psychology texts it becomes apparent that the theoretical aspects, including the definition of personality, generally have a broader scope than the pertinent research. It does not need to be pointed out that intuition plays an important part in the theoretical formulations.   Many of the researches previously considered important are falling by the wayside, and again, theory is constantly being revised.   The fact of the matter is, however, that many of the researches still reported do not focus on the theory or attempt to test it.

A major problem area which has been neglected arises from a lack of clear conceptualization, and further, from the acceptance of premises intuitively without sufficient investigation.   Writers have tended to confuse reports of *how a person says he would act* and *how he actually acts*.   For the sake of clarity we may postulate the following tentative ranking of behaviors.

1. The *focus action*—level of reality (John hits a person).

n_1 The *hypothetical enactment*—rôle playing (John shows how he would act in the situation defined for 1. *or* how he would hit a person).

n_2 The *hypothetical telling*—interview response (John tells how he would act in the situation defined for 1. *or* how he would hit a person).

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[4] For a discussion of this point see: Merton, Robert K., *Social Theory and Social Structure*, The Free Press of Glencoe, Illinois, 1949.   (Chapters II and III.)

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n_3 The *hypothetical writing*—questionnaire response (John writes how he would act
.   in the situation defined for 1. *or* how he would hit a person).
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.
.

We may take a moment to make clear the ranking. The dots represent
distance which the word ranking implies is not known. The ranking is
tentative for a number of reasons. At this point there is no anticipation
that the *telling* is closer to the *focus action* than *writing* is. It is assumed
at this point, however, that *enactment* is closer to *focus action* than is
telling or *writing*. Further, there is the possibility of a ranking, as an addi-
tional dimension, in terms of *re-enactment*, *re-telling*, and *re-writing*. Such
a ranking as this last mentioned might be incorporated as subsidiary
to the main ranking indicated above, or might be treated as parallel to it.
It is obvious, however, that similar problems are involved.

The concept *focus action* is here introduced to identify the reference
point of the analysis. As the term implies, the *focus action* is the action
emergent in the situation upon which we are focusing our attention. In
sociometric terms, the *focus action* is generally identified as the level of
reality; the *hypothetical enactment* is generally identified as the rôle
playing situation; and, the *hypothetical telling* corresponds to the interview,
such as is carried out in the *warming up* period and after a scene is com-
pleted. In the psychodramatic situation, the interview may serve to pro-
vide cues and clues, to ascertain easily communicable information, and to
focus and clarify observed behavior. Rôle playing is taken to be an
approximation of what a person would do in a given situation. The
person shows, goes through the motions of, how he would behave. Rôle
playing is assumed to be closer to *focus action* than *telling and writing* since
experience has shown that in the playing of the rôle, persons frequently for-
get that they are playing the rôle, and respond as in a *focus action*.[5]

It is possible that all four behaviors in the ranking will correspond for
any given case in terms of *focus action*. At the same time, none of us is

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[5] Dr. Moreno frequently applies the term "surplus reality" at this point. In
the psychodramatic situation, the person may drop the inhibitions which he might
carry to a greater extent than in an interview situation, but at the same time, other
inhibitions which would be present at the level of reality are not present. In being
free to behave as he will, the person exists in a "surplus reality." The word surplus
refers to additional freedom present.

naïve enough to believe that this is always the case. In the experimental work, however, we find studies conducted with responses at level n_3, and implicit (frequently explicit) in the interpretation of these experiments is the assumption that this is predictive of *focus action*. It is not the purpose of this paper to criticize the literature in the field. Rather, here we wish merely to make explicit the distinction indicated in the ranking.

Hypothesis

The main hypothesis to be tested in the projected research is the following: There are differences between *focus actions* and the references to *focus actions* in n_1 and n_3.

Two subsidiary hypotheses are the following: The greater the ability of the respondent to identify with the *focus action* in n_1 and n_3 (as measured by difficulty of making responses in terms of the *focus action*) the smaller the differences between the responses. References to *focus actions* in n_1 are closer to *focus actions* than are references to *focus actions* in n_3.

A Point on the Underlying Theory

In the *focus action* the person responds immediately to the situation in which he is found. He may or may not be aware of the forces which bring forth the particular response. In the ranking, the further we get from the *focus action*, the greater the possibility for the individual to search out his motives, to identify the statuses he occupies, and to consider the norms of expected behavior impinging upon the situation. We may consider this a distinction in terms of theoretical formulation which is relevant to the interpretation of the experimental findings. *Focus action* is individuated behavior at the extreme, and the polarity away from this in terms of consideration of the norms of expected behavior which impinge upon the situation may be considered as institutional behavior. This does not exclude the case in which the individuated behavior is institutional behavior.

Test of the Hypothesis

The hypothesis will be tested by the use of the following: (1) Application of the Picture-Frustration Study for Assessing Reaction to Frustration (Rosenzweig). Appended to this form for simultaneous completion will be a questionnaire concerning "attitudes" towards the testing situation as well as specific questions in regard to difficulties encountered in the completion of the form. (2) Application of standardized tests in rôle playing. The standardized situations will be patterned after the situations depicted in the Rosenzweig. (3) Applications of situations (standardized)

which are not to be presented as rôle playing but which will be created during the same test period as (2) above. Such situations will be created before the rôle playing begins, between rôle playing situations, and after the rôle playing situations are completed.

As indicated earlier in the text, responses to (1) are taken to correspond to n_3, (2) to n_1, and (3) to *focus actions*. Problems in the standardizing of (2) and (3) are not dealt with here.

Theoretically, since the focus of this study has been indicated to be on responses, one subject could be a sufficient sample if there were sufficient scores. However, to allow for an interpretation in terms of subjects as well as responses, a minimum sample size has been estimated to be thirty subjects; if conditions permit, a larger sample will be used. Similarly, it might be argued that a single *focus action*, with the related n_1 and n_3 responses might be sufficient. In such a case, however, the specifications of the situation would have to be perfect, and unless temporal controls were perfect, it would be impossible to estimate the effect of one test upon the next. Thus, it is considered more propitious to use a class of behavior such as is encompassed by a test such as the Rosenzweig.

The subjects to be used are college students. Approximately two hundred students will be used for (1), application of the Rosenzweig taking place early in December 1950. The researcher will not be identified by the test administrators. Application of parts (2) and (3) (which are carried out at the same time) will begin in February 1951. Appointments for the test situations, which must be carried out individually, will be made with as many of the original two hundred subjects as is possible. The incentive for participation is the promise of test results with interpretation. All testing should be completed by the middle of March, 1951.

It is obvious that there will be a number of major problems in standardizing scoring techniques. Both (2) and (3), which occur for any given subject simultaneously, will be permanently recorded on wire and then transcribed. The transcribed responses will be scored on the same criteria as those of the Rosenzweig. Data such as postural changes, facial expression, movement, etc., are not gathered in the Rosenzweig; such data which are gathered for (2) and (3) will have to be interpreted separately.

Problems in the analysis of data, and in the interpretation of data, will be elaborated in a more complete presentation. For analysis, it is apparent at this point that it is necessary to consider group changes as well as individual cases.

This is but one test of the hypothesis, and many others may be devised. The results of a research of this type should serve to clarify some theoretical aspects of social psychology as well as to indicate new foci for research.

A SOCIOMETRIC APPROACH TO TEACHER TRAINING

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INTRODUCTION

It is almost a truism that we live in a time of great cultural conflict. With one hand we are hanging on to the competitive behavioral patterns of the era of *laissez-faire* individualism. With the other we are reaching out for a way of escaping loneliness, rootlessness, and paralyzing anxiety. Conflicts of this type result in our being deluged with a manifold of alternative ways of acting. It is the inconsistency with which we respond to these alternatives which generates tension in our living. We sacrifice one week's pay to the Community Fund, then we refuse to rent living quarters to families with children. We send our children to school for a fine academic education, but we hire "practical" men to get things done. These inconsistencies and many others result in making contemporary living an affair in which conflict and tension are the rule rather than the exception.

Such a situation tends to produce individuals who are markedly unable to cope with problems of even a limited personal nature. They cannot find satisfactory vocations, make stable fulfilling relationships with people (within or without the home) or comprehend and act on basic social problems. These individuals are often of two personality types—those characterized by apathy, who seek to escape from action and are constantly fearful of losing whatever status they may have; and those characterized by impulsive action, who strive by aggressive opposition to blindly challenge authority and thus attain the status they do not have and thus do not fear to lose.

We know from sociological data that many changes in our society are needed—changes, which are possible only by means of clearly conceived and well directed action. But these "typical" personalities cannot possibly initiate this kind of action. No effective action is possible when motivated by the desire to maintain a static position. For the attempt to maintain an existing status demands at least the partial neglect and denial of the reality of social change. Neither is such positive societal action possible when motivated largely by the narrow personal desire to oppose. The anxious rebel does not accurately perceive the whole picture of the needs of society, nor does he see his action in the proper relation to them. It is the partiality and incompleteness of their approach which prevents either

of these types of persons from taking an effective part in social action. Both of them tend to increase social tension and, as we know, such tension blocks rather than facilitates action.

One might expect that education in such a period would play an important rôle in training our children to respond more adequately to societal needs. This, however, is not the case. Rather than helping redirect and restructure our culture more effectively, education, typically is so much a part of our culture that it acts as an instrument for its reinforcement and maintenance. As a result the traditional form of our present education reinforces the kinds of personalities described above. The student is taught to accept the instructor as the ultimate authority in the learning process. The student must produce only what he is told, read what is assigned, and give back only what the teacher will accept and understand. The acceptability of the student's production is, of course, determined by the teacher's personal ability to perceive and interpret. Since all perception is limited, a teacher-dominated (traditional) class is an unnecessarily narrow experience. Furthermore, in a traditional educational set-up there is little room for creativity, originality, or the addition of anything to the teacher's complete and profound understanding. What else can a student do other than become passive or react blindly to such frustrating inhibitions of his natural spontaneity and creativity?

Nevertheless the school is a prime molding force. It is also an institution which is relatively stable and potentially capable of intelligent direction. Therefore it is possible that through the school this vicious cycle can be broken. This paper describes a new educational approach which has been used in the training of teachers. This approach attempts to provide a revised conception of the classroom situation by shifting the educational focus from the individual student to the face-to-face (social) group. The group thus becomes the basic instructional unit. By means of this shift interpersonal relations in the classroom (both of student to teacher and student to student) which are necessarily existent but often escape adequate consideration, are more effectively handled. The details of this process will be treated at length in the body of this paper.

In our society socially isolated individuals seek to escape from the immense responsibility of making basic decisions. By extending the base for decision-making from the individual to a larger unit, namely the social group, this overburdening responsibility is somewhat alleviated. By working within a group the individual is led to acquire dynamic adaptability in the playing of various rôles. He must be able to take his place in the

group structure as a flexibly operating social organism. This demands that he play not one, but many rôles.

But the group approach does many other things for the individual. He develops a sense of belongingness, a sense of being an integral part of a social situation, therefore his sense of aloneness is alleviated. Ideas and values are more easily exchanged thus broadening and extending his possible ways of action. The added security and reinforcement which is present makes him better able to voice his own creative, original ideas and to accept and internalize those of others. The above factors plus the individual's positive identification with the broader, common social interests of the group, make for an experience of far reaching concomitants.

Sociologists tell us that no society ever acts as a homogeneous group. In order to adequately implement social action communities must be dealt with in terms of their constituent sub-groups, not as homogeneous social units. Effective education should therefore be concerned with a method for discovering and instituting the most efficient way of sub-grouping the individuals of a community. To be effective this method should produce groups whose members are concerned with the relationships between one another. They should also recognize the importance of proper group interrelationships within the entire community. Sociometric grouping is one method by means of which these goals may be achieved.

No such group approach to education could be possible unless adequately trained teachers were available to lead the process. This statement is not a solution to our problem. It rather presents us with a dilemma. This is due to the fact that teacher training is typically both highly academic and individualistic. It stresses individual training in the skills of writing and reading rather than group skills of effective social functioning. The prospective teacher is taught to maintain a status difference between himself and his class in most of their activities, and he maintains it in part by demonstrating his superiority in terms of his knowledge of traditional subject matter. He has had little training in the skills of human relations and therefore he finds it difficult to project himself into the student's social situation.

The group approach requires that the teacher be one of the class— not a person apart from it. In no other way can he effectively lead and be sensitive to the psycho-social needs of his students. He is the instigator of the process of social education, but any authoritarian status which he originally has he attempts to continually reduce. To train teachers for this process means to train them in groups, partly so that they themselves can

use this approach later on, but more importantly so that they may feel and know the meaning of effective social interaction in an educative process. Only if they have been a part of such a process can they really know what it is and how to use it. Although sociometric grouping may not be generally applicable to all varieties of educational situations, it is our belief that in the training of teachers for group-centered education it is an essential. It is the purpose of this paper to attack the problem of sociometric grouping in teacher training and to describe a particular situation in which it is being carried on.

THE PROCESS

The sociometric grouping with which this paper is concerned is used in certain student sections of a two-semester course in the Foundations of Education given at Roosevelt College in Chicago. This course is required for all prospective teachers but may be elected by students in other departments of the College. The basic purpose of the course is to develop in the beginning student a conscious awareness of interpersonal and intergroup relationships which necessarily exist in all educational situations. Such an awareness is effective and meaningful only if it leads to competence in the skills of functioning in such relationships. The experience of the individual in the social group is thereby asserted to be the basic educational experience.

Since group experience is foundational for the educative process, it follows that this course should be organized and carried on through a structure of interrelated social groups. In order to work most effectively these groups should be composed of from five to ten persons—the optimum number being between seven and eight—thus making possible face-to-face relationships between group members. It is a further hypothesis that such a course will be most effective if these working units are formed basically in accordance with the individuals' personal choices. For the purpose of determining these choices a sociometric test is given at the end of the first week of class sessions. Since it is largely on the basis of these tests that the students are grouped, let us consider the details of the test and the method by which the grouping is determined.

The first step in the grouping procedure is to "warm-up" the students to the process of making the personal choices required by the sociometric test. This warm-up involves two necessary and mutually reinforcing aspects. The first is the process of getting-to-know and feeling-at-home with the other members of the class. In doing this an atmosphere is created

which becomes increasingly permissive of the expression of feelings and the sharing of personal backgrounds, likes, and dislikes. In such an atmosphere personal attitudes are both consciously and unconsciously communicated. Furthermore, the emerging positive and negative feelings toward other individuals become more valid indications of the ability to work together.

The second aspect of the warm-up process involves the anticipation and understanding of the jobs which students will be asked to coöperatively undertake. Unless students are realistically aware of the kinds of activities which will take place and the interpersonal forces which will operate in working together, their choices become both artificial and shallow and therefore less valid.

These two aspects of the warm-up process can only be accomplished if they are developed together. Getting-to-know involves getting to know in a real interpersonal situation. A situation is only real if it integrally ties together past experiences with anticipated future needs and demands. In this class the real situation is primarily concerned with working together on educational problems. Therefore, students will get to know each other best by anticipating how they will interact in meeting the demands of working together in a group on the required tasks. Furthermore, the understanding of a future job must be concerned with understanding the interpersonal relationships with which that job is concerned. This means getting to know the people with whom the job is to be done and getting to know how they will react to the job situation.

It is important to realize that both aspects of the warm-up process—getting-to-know and anticipating future needs—apply to the instructor as well as the students. He must be warmed-up to the situation just as well as they. He must get to know them, and they him. He must know and be sensitive to their anticipations and expectations, and share with them his anticipations and expectations, both for the course and for their vocational futures.

In order to anticipate and understand such a job situation a purely verbal description could not possibly suffice. For no one person could verbally communicate with sufficient realism, the specific interactions and feelings which will develop. Furthermore getting-to-know involves acting together in a situation which is felt to be real, rather than listening passively to a description of a past or future situation.

For these reasons some kind of spontaneous dramatic technique is needed for the warm-up process. The spontaneity of this dramatic procedure

requires a specific kind of planning and preparation in order to set a situation in which warm-up can effectively take place.

The method by which this is accomplished is as follows: The first two or three meetings of the class are used as an orientation period. During this time the class participates in various activities to acquaint the members with one another and with the main focus of the class. The students are put into dramatic situations where they are required to tell each other their names, their reason for taking the course, their past educational experiences, and their expectations. This is done in several ways: (1) by a group interview in which each student chooses someone to introduce to the class and the class questions him further; (2) members of the class are asked to turn to the neighbor sitting on their right (or left) and exchange with him pertinent personal information and expectations for the course; (3) pairs or small groups of students are brought to the front of the class and asked to discuss the same kinds of information while the class observes. All of these situations not only aid in the getting-to-know process but also serve as examples of ways in which social interaction takes place. These situations may then be analyzed by the class in order to heighten sensitivity to social processes and improve the process of social interaction.

To carry this experience further, randomly chosen groups of students (of about the same size as work groups in the class) alternately dramatize various kinds of situations and problems. This enables students to psychodramatically anticipate situations which will occur when they actually become group members. Past experience has shown that there is a fair degree of realism in these dramatized group meetings even though they are conducted in front of the class. Most of the situations which are dramatized are concerned with making group decisions with which each group will be faced as the semester progresses. These decisions are concerned with such matters as choosing a time and place to meet, building a project to be investigated which will be interesting and useful to all the members of the group, assigning work to group members, selecting representatives, and dealing with group members who have not fulfilled their responsibilities. These dramatic situations not only serve as an aid in anticipating jobs, but also serve as examples of how group processes such as leadership, participation, and decision-making, start and develop. Throughout this whole orientation period it is continually mentioned that the purpose of these activities is to aid students in the choosing of individuals to work *with, on* certain jobs.

At the end of this orientation period each student is given a numbered card on the back of which he records the data which are requested. These data are given in response to the following instructions—"List on the back of your card the numbers of those whom you choose to work with in a group in this course. List also the numbers of those with whom you would not choose to work. Record your choices according to three levels of intensity. Those whom you choose most strongly list at the first level. Those whom you choose less strongly list correspondingly at the second and third levels. Make as many choices on each level as you feel inclined to do. The more choices that you make the more effectively you can be grouped. You will be grouped in accordance with the total choice structure of the class. This means that you should generally expect to find yourself in a group with at least two of the persons whom you chose positively and with very few, if any, of those whom you chose negatively. You may rest assured that the choices you are about to make will be private and will be known only to you and to the instructor. In order to feel perfectly free in writing down these choices seat yourself so that there is at least one seat between you and any other member of the class."

It appears fairly clear that the effect of the period of personal interaction prior to the writing down of choices is not only to sharpen social perceptions but also to psychologically warm-up the class to the act of actually making social choices. Through this interactive process students become convinced that they know each other better. Therefore they participate in the choice process with less resistance and correspondingly with more efficiency. This is only to say that the warm-up process creates an atmosphere of social permissiveness in which there is a free interplay of social forces. Social inhibitions are thereby reduced and social security (security with one's classmates) is increased. In such an atmosphere sociometric choices are most likely to be valid.

The atmosphere of permissiveness is furthered by continually stressing that positive or negative choice with respect to membership in a particular group, does not mean acceptance or rejection of a total personality. Sociometric choice is directly concerned with only one kind of rôle at a time— membership in some particular social group. Other criteria of choice may produce different sociometric pictures of the same individual. Each criterion of choice determines a particular rôle of the personality concerned. The total personality is composed of many rôles all of which can never have the same quality (positive or negative) or level of choice at the same time. Every person, therefore plays rôles some of which will be positively chosen

and others of which will be negatively chosen in any particular situation. Such considerations, when explicitly stated, tend to reduce the natural reticence in making positive and negative choices. The belief in the privacy of choice data is also an aid in reducing this reticence in making choices.

The choice data from the sociometric test are used in two ways. They are first used to make a partial sociogram illustrating a section of the choice relationships. This sociogram is drawn on the basis of the first level positive choice written on the cards plus all of the mutual first level positive choices. This sociogram is distributed to the class for the purpose of making them conscious of the existence of such relationships without at the same time subjecting them to the damaging force of the whole choice structure which a complete sociogram might do. The sociogram also serves as a tentative hypothesis of the possible ways in which the class may be effectively grouped.

The basic purpose in such groupings is fourfold:—to include in each group at least two of each group member's positive choices; to maintain the "natural" choice relationships (chains and circles of choice) which the sociometric data seem to indicate; to have in the same group no persons who are rejected by others of the group; to have in the same group persons who positively choose each other at the highest level. The third condition is not always possible to achieve but it has always been possible to eliminate all mutual negative choices as well as about 80 percent of the non-mutual ones.

The groups are tentatively set-up according to this design and then checked for heterogeneity with respect to race, sex, and choice status. The attempt is made to arrange the students so that each group will have, as nearly as possible, an equal distribution with respect to race and sex. However, the preponderance of females and whites makes this requirement difficult to achieve. With respect to choice status, it is most desirable to have groups in which half the members are chosen an average number of times (for a class of forty this would be somewhere between five and ten choices), one-fourth who are social isolates (zero to three choices), and one-fourth who are over-chosen (ten or more choices). In making these groupings the basic category is the choice factor. Heterogeniety becomes a determining factor only when it does not violate strong choices.

It is very important that friction in the process of group birth and development be minimized. This will be furthered if, during the warm-up period, false promises and unrealistic expectations are eliminated as far as possible. It is for this reason that students must be explicitly told: (1) that their choices will play a major part in the grouping process; (2) that they

should not expect to find in their group all of those, and only those, whom they chose positively.

The result of the above sociometric processes is the announcement of the specific group assignments. This usually occurs in the class meeting which follows the sociometric test. These groups, which generally vary from five to ten members, meet immediately in various parts of the classroom for the purpose of group birth. Their agenda at this time is the setting of a time and place for an out-of-class group meeting (which all groups are required to have at least once each week), the starting of a group "diary", and the selection of representatives for the group representatives council. Since these groups are the basic instructional unit of the class, let us look at the various aspects of their process and functioning.

Now that these groups have been born with the obstetrical assistance of the various types of sociometric instruments mentioned above, they embark upon a two-fold life experience—that of in-class and out-of-class activity. These two aspects are in no sense separate from each other but are rather mutually reinforcing and enriching. It is instructive however, to abstract one from the other for the purpose of gaining a clearer picture of the whole on-going process.

To initiate the out-of-class activities the students are instructed to meet in their groups and begin to "build" a project for investigation. In the first semester class these projects are to be concerned with the general problem of "How does learning take place most effectively?" In the second semester class these projects are to be concerned with "What problems does a new teacher, trained in modern methods, face in the existing school system?" The choice of the specific areas in which these projects are built is left to the discretion of each group. It is suggested however that projects be directed toward those problems which students anticipate having in their future vocational experience. In other words, the attempt is made to have students learn specific ways of improving their educational techniques in areas which appear to be particularly fraught with difficulty.

In briefing the class for sub-group meetings, it is important that the instructor emphasize several things. The students should be sensitized to the fact that all valid group experience starts in a seemingly chaotic fashion. Actually, when seen in retrospect, it turns out that during this chaotic period the group has been learning to know itself so that it can function better later on—that is, it has been "clearing the ground" for building its project.

Furthermore, progress towards a task goal should not be pressed too

rapidly. Group members need to consciously direct themselves to the problem of getting to know each other and feeling at home in their groups. Task progress after such a preliminary warm-up is always much more rapid.

This getting-to-know may be facilitated in many ways. The exchanging of past experiences, future expectancies, and present reactions is a good way to start. To further this end and to acquaint the instructor with the students, individual autobiographies are requested. The getting-to-know process may be carried still further by a group dramatization of a common problem.

Such a dramatization is carried out in the third week of the course. At this time each group is allowed a maximum of fifty minutes of pre-planning. Then groups are instructed to present to the class a fifteen- or twenty-minute scene depicting some phase of a problem with which group members are commonly concerned. In this dramatization two important purposes are served: (1) each group, as a whole, is introduced to the class and, (2) the members of each group get to know each other in an action-centered context. The subject-matter of the dramatization is decidedly secondary. However, it usually turns out that the general project area or problem focus develops from this "planning-dramatizing" experience although it may or may not be explicitly apparent in the dramatization itself.

The second point to emphasize is that discussion and deliberation, although enjoyable as well as productive, should lead to decision if they are to prove their worth. Therefore the group needs a series of deadlines which must be met. Some of these will be set by the instructor—for instance, when project "blueprints" must be submitted, when readings and diaries are due, when groups will conduct class sessions, when the results of project investigations are to be communicated. However, each group must also set other deadlines for itself with respect to its own functioning. These include such matters as when individual research is due, who will take what part when the group takes its turn in conducting a class session, when the group will conclude the research phase of its project and start to formulate its conclusion.

Third, a designated initiator or "leader" is usually desirable for all infant groups to enable them to make a good beginning. This kind of individualized leadership should be gradually broadened as the group matures. In this way leadership, as well as the other functions of the group, becomes shared by all of the group members.

In the fourth place group members should keep in mind that no one person can play, equally well, all the rôles which are required in a well-

functioning group; neither can one person play exclusively one type of rôle. Each person in a group should, at the appropriate time, learn to play those rôles which he is qualified to take, and also to continually expand both his rôle repertoire and rôle flexibility. This can only be done if from the very beginning the group members, together, attempt to constructively criticize their processes, development, interactions, and achievements. This is most effective if done in an evaluation period at the close of *each* group meeting. It may also be necessary, during the semester, to devote an entire meeting to an evaluation of the development thus far achieved. Out of these evaluations should grow specific agenda and plans for next meetings, next steps, or the rest of the semester. In doing this group members will come to look at activities, such as leading, observing, and criticizing, as group functions not as one person's permanent assignment or possession. If these four factors are stressed at the very beginning, group functioning should be greatly facilitated.

Let us now look more closely at the kind of functions which a group performs in its out-of-class activities. In the first place it builds a project which should include the interests of all group members. In doing this the attempt is made to poll the problem interests of the group and to see how they can all be interrelated into one coöperative investigation rather than choosing between the various suggested problems. This makes each member feel that he is actively involved in the group task and his participation becomes, therefore, increasingly vitalized.

Having selected the project area, there should then follow a task break-down of it in terms of who is to do what, and when. This is a place where deadlines are definitely indicated. The instructor sets a time at which the groups are to complete their task break-down. In order to do this each group must correspondingly hold its members to deadlines in the meeting of their individual responsibilities. At first these responsibilities have to do with research related to the building of the group project. Later on each group will decide on the form and content of several sessions in which it will communicate to the class the results of its investigation. It is in this process that each group decides what ideas are most important to communicate and what method of communication is best suited to its needs.

Each group is responsible for three such communication sessions during a semester. The first one, as described previously, is relatively unplanned and serves to initiate and stimulate interest in project-building. The second, which occurs at approximately mid-semester, is used to indi-

cate how far each group has progressed in its project building and in its own development. The third occurs at the end of the semester. In it each group attempts to communicate the results and conclusions of its project building and investigation.

The first communication session is evaluated orally by the class as a whole. The class, led by the instructor, attempts to answer the questions: "How effective was the communication?" "What was their central idea?" "How could it have been improved?" The second and third communication sessions are evaluated in writing on a short answer form by each student in the class. The forms which are used for the second sessions are initially worked out by the instructor. They are then discussed by the class as a whole and revised by an intergroup student committee. These revised forms are the ones used in the evaluation of the third communication session.

During all of this decision-discussion process a diary is kept by each group in which task progress as well as group psychological progress is noted and described. These diaries serve many purposes. They indicate, both to the group and to the instructor, the relative effectiveness of each group's functioning. In order to do this members alternately take their turn at keeping the diary. Each member usually keeps the diary for a period of one week. During that time he records his account of all activities of the group including a full account of all group discussion, decisions made, interaction between group members, and general atmosphere. The final section of each diary report should include a general evaluation of the meeting and the proposed agenda for the meeting to follow. The accounts should be as spontaneous, personal, and specific as the diary-keeper's personality will allow. The diary containing the current reports should be circulated each week and read by all members of the group. When other group members differ with the diary-keeper's report they are urged to append their comments.

The group thus becomes more self-conscious and with the instructor's help, problems of group functioning can be attacked. Furthermore, in the diary, agreed upon procedures should be recorded, individual attendance kept, reading notes entered, bibliographies listed, questions noted for further investigation, and research data accumulated. In other words, the diary becomes the repository of all that the group is and does. It is therefore public to all the group and subject to the critical evaluation of the instructor at least every week.

Grades and evaluations are required at two points in the semester—

after the second and third communication sessions. After the second communication session is over, each group has three jobs to do. It evaluates its own group members. It evaluates itself as a group. It makes plans for improving its functioning for the rest of the semester. After the final communication session each group again evaluates itself and its group members, and in addition, it evaluates the class as a whole, the instructor, and the results of its project.

This procedure is carried out in the following way. During the semester the problem of evaluation is continually raised in class, and groups are instructed to formulate the standards of performance and method by which their grades will be determined. The various aspects and problems connected with this phase of activity are brought out, in part, in class discussion, but the final decisions of what methods and standards to use in grading its group members are the responsibility of each individual group.

Through experience it has been found that considerable structure is necessary to help groups and individuals see themselves in relation to the rest of the class. In order to implement this, groups as a whole graded by both the instructor and the class. The group grade is given on the basis of the class evaluation of the group communication or teaching session (as described above), and the instructor's evaluation of the diary. The evaluation of the diary is carried out according to publicly stated standards and methods which have been determined by the instructor and the council of group representatives. Diaries are generally evaluated in light of: (1) completeness of required records; (2) ability to critically record processes and effectively plan to improve them; (3) adequacy of research records; (4) completion and quality of assigned tasks such as reports of readings and proper evaluation of members.

The grades for individuals are determined in the following manner. Group members are evaluated by their group-mates on the basis of standards of performance which have been decided upon by the group. As a result of this evaluation all of the group members rank each other on one of five levels (to roughly correspond with the College requirement of A, B, C, D, or F grades). In case of an irresolvable conflict in the ranking of an individual, the group may call in any agreed upon outside source to arbitrate. To date this has never been necessary, although in a few cases it has taken many hours to settle the various types of difficulties which emerge in this process.

After the assignment of ranks (or levels) for each member, the group

is assigned a group grade which indicates the average to which the individual group members' grades must conform. In other words, a group which is graded "B" must have the average of its individual grades closer to "B" than "A". The average may, however, be lower than "B". It should be noted that at the time the group members are ranked they do not yet know their group grade. The group members, therefore, have no way of knowing what overall assignment of ranks will give them the highest grades. (The length of this paper does not permit a detailed description of the mechanics of the grading procedure).

It is hoped that by this structure "bargaining" between members—a general human frailty—is reduced to a minimum. It has been our experience that some such limitation is necessary to keep students from knowing what the final effect of the ranking will be. This is due to the fact that in the process of self-evaluation two conflicting drives are present. One of these is the desire to be guided by high moral principles and rank other students and themselves at levels which their performance justly deserves. The other is the desire to get the highest possible grade for themselves or the largest number of high grades possible for their group-mates. The resolution of these drives is often more than students can cope with.

The entire grading procedure is given a trial after the second communication session in order to test it out. Groups are given the option of counting these mid-semester grades as much as fifty per cent of the final individual grades. The official grading is, however, accomplished in the final meeting of the class.

In preparation for this final meeting each group member writes an anonymous statement of his evaluation of the class, the instructor, his group as a whole, and any other factor which he sees fit to comment upon. At the final meeting these statements are attached to the diary. Excerpts from such evaluations, as well as from the diaries themselves, will be included later.

It should be noted that each group is required to rank its members without special privilege for any individual. The method and standards by means of which this ranking is done must be decided upon by the group as a whole and explicitly stated in the diary prior to the grading session. After the ranking has been completed all of the details of the procedure should be recorded in the diary accompanied by a detailed accounting and justification for each group member's grade. This justification must be made in accordance with the standards which were agreed upon and used in the ranking procedure.

Throughout the entire evaluation process the goal is to introduce an effective balance between the subjective and objective factors. To that end words such as *interest, effort,* and *coöperation* which might be considered as descriptive standards for individual functioning, are spelled out in terms of specific observable activities actually carried on by individuals in the group and class. For instance, the group tries to find the answer to the question, "What kinds of things does a coöperative (or interested) group member do by means of which his coöperation (or interest) may be observed and evaluated?" In this way evaluation becomes the process of coming to an agreement, in terms of previously agreed upon standards, on the degree of effectiveness of certain activities which were carried out by members of the group. The grading of individuals is thus a consensus of the subjective perceptions of objectively observed acts. By use of such a method it is hoped that personal bias can be reduced.

The process of grading itself becomes an additional opportunity for group learning. This occurs in three ways. In the first place grading of this kind helps to indicate both strong points and inadequacies in group and individual behavior. These strong points may be reinforced and the inadequacies corrected by means of the agreed upon standards for good group functioning. In the second place, the process of grading takes place in an atmosphere fraught with emotion and conflict, and is therefore an excellent opportunity for actual practice in the skills of effective group functioning in a crisis situation. A third opportunity for learning occurs when intergroup committees meet to revise group grading standards and methods.

When the group has finally evaluated its members and turned in its diary, its life in the course is over. However it is interesting to note that several groups gained such impetus and social congeniality that they have continued to meet at infrequent intervals even though the course is ended. Let us now look at the functioning of a group in terms of its in-class activities.

The groups in this course are born in the classroom, but by the end of the second week they are weaned so that they may carry out two types of activities—the extra-classroom ones described above, and those which pertain directly to the regular class meetings. These two areas of activity are in no sense unrelated. The out-of-class activity is designed to stimulate groups to participate and learn more effectively in class. The classroom activity is constructed so as to be a stimulus and resource for the out-of-class activities as well. Let us see some of the ways in which this may come about.

In class the group is the organ for activating discussion. Problem censuses for determining classroom agenda come from groups after they have broken up to discuss what problem areas they consider important. The break-down of a particular problem area into specific problem situations is also accomplished through group discussion and group response. In each case this is done by asking a question of the whole class, such as, "What problem areas are you interested in investigating?", or "What specific situations do you see where this problem might arise?" The class is then told to break up into groups for a period of from five to fifteen minutes depending on the nature of the question and the maturity of the class. The class then reassembles and groups report the result of their discussion. This is followed by class discussion and decision on the question at hand. In general this is the method by which all class business is transacted. In this process groups are stimulated to act quickly and effectively and also to receive criticism and new ideas from other groups and from the instructor.

With the development of well-integrated groups a new type of social problem arises. We find that in creating a well-knit internal organization, groups develop an over-concern for their own special problems to the exclusion of those of the rest of the class. In so doing they tend to become socially isolated, competitive units. To alleviate this difficulty meetings of representatives of each group are held once each week. At these meetings each group is represented by two members, a permanent representative and a rotating representative. This procedure makes it possible to more effectively deal with four kinds of problems: (1) the need of students for acquaintance with persons, problems, and ideas of other groups; (2) the need to deal explicitly with common stumbling blocks which groups have already encountered; (3) the need for instruction and further experience which will aid in making group processes more efficient and future problems more easily attacked; (4) the need for a workable student-teacher planning and decision-making body.

In these meetings the leadership is rotated from one representative to another. Process-consciousness is also developed by an evaluation period at the end of each meeting. The attempt is made to have these meetings exemplify principles and practices which each group should use in its own functioning. These group representatives meetings are intended to serve as a bridge between the in-class activities of the students and their out-of-class activities in their own sub-groups.

These in and out-of-class activities become one when the groups communicate to the class the results of their project investigation. In this

activity each group presents to the class the results of its out-of-class investigations. In doing this the group may use any form it chooses. Some of the forms used thus far are, dramatic presentations (spontaneous or rehearsal), movies, pantomime, dance, panel discussions, debates, simulated radio broadcasts, recorded interviews, symposiums, and round-table discussions. These and any others are acceptable. There are only two limitations. The group communication session is held to a definite predetermined time limit, and the group must plan for adequate involvement and participation of the rest of the class.

This latter may be accomplished by a question period at the end of the communication session, by having the audience take part in the presentation of ideas, or by using audience questions on a particular topic as a means for spontaneously determining the direction which their communication will take.

Each of these sessions is evaluated by the class (as described above). However, in order to eliminate intergroup prejudice and competitiveness, the evaluation sheets are unsigned and are not given to the group evaluated until after all of any one set of communication sessions is completed.

It is most important that groups focus their teaching sessions on some clearly pertinent aspect of their problem. This helps each group communication session to be a means for stimulating the class to discuss and learn in an active dynamic way. Without this caution groups tend to perform in an encyclopedic fashion which the class passively observes. The group, in communicating and directing the class session, should enter actively into the process of social education in the teacher rôle rather than just showing off its erudition (or lack of it). In this way these prospective teachers feel the pulls of the educative process from another angle, and therefore learn to deal with it more effectively.

One major experience should now be described in which the whole class, rather than the sub-groups, is the functional unit. This is the investigation of the various aspects and forces which are resident in specific educational problem situations. This activity is preferably carried out by means of spontaneous dramatization (psychodrama), but sometimes it can only be accomplished through class discussion without group break-down. A paper of this length does not permit a complete exposition of all of the details of this dramatic process and its manifold variations and effects. However, a brief description of the type of psychodrama most generally used in this course seems to be desirable.

First, a particular problem situation which is meaningful and pertinent

is selected through sub-group discussion. Then the class as a whole, led by the instructor, proceeds to "set" the scene for the dramatization. This is accomplished by discussing the nature of the situation, when and where it occurs, the kind of personalities involved, and their various interrelationships. Next, the instructor "casts" various members in the required rôles. This means not only selecting someone to play the rôles but also discussing with them and the class the nature of these rôles as they relate to the other personalities involved. A warm-up in which class and actors are psychologically transported from the classroom to the scene of the action is necessary before the dramatization begins. At appropriate times during the dramatization the instructor-director cuts the action, changes it, directs it, and ultimately terminates it. This leads to the final evaluative phase in which all participate in a critical discussion of what has taken place. Often one or more of the audience is called upon to observe the drama in process and present his observations in the evaluation period.

Several facts should be noted about this dramatic activity. In the first place it is not designed to rapidly give large quantities of factual information. This is better done by a resource lecture. It is designed to help the class as a unit to see and feel some of the dynamic relationships which exist in the selected problem situation, some of which they may not have been aware of before. In doing this the class is not only drawn into a more cohesive unit, but it also participates much more vitally in the discussion and critical evaluation which both precede and follow the dramatization. For this reason these two phases should never be neglected or underestimated. It is by this process of spontaneous dramatization that the relationships which sociometric data have revealed can be dealt with most effectively and eventually modified. This can take place only when the problem for dramatization is realistically set and the evaluation of the dramatization is constructively critical. It can be truly said that this dramatic experience is the dynamic which keeps the whole training process continually revitalized. Let us turn now to see what some of the results in the course have been to date.

RESULTS

To date this procedure has been used for seven semesters in which a total of approximately thirty-five classes containing a total of approximately 250 groups have participated. During this time the procedure has gone through considerable modification in accordance with the criticisms made by the students at the end of each semester. By this means methods

and techniques for structuring group experiments have been developed which seem to be increasingly effective in revealing and dealing with the basic underlying factors in interpersonal functioning. At present these methods and techniques are not designed to produce scientific results directly. Rather, they are designed to lead to their own continual modification which will gradually shape them into instruments for better training as well as scientific investigation. Our results, therefore, are not specific scientific conclusions but rather indications of avenues through which such conclusions may be reached. It is our intention that before many semesters our program will become scientifically productive.

For the purposes of analysis our results can be divided into three categories. First, there are task results—concrete accomplishments produced by the members and groups of a class. Second, there are interpersonal or social results—changes in the attitudes and behavior of individuals or in the pervading atmosphere of groups or classes. Third, there are cognitive results—generalized learnings or knowings. All three types of results are obviously interrelated and overlapping and should never be atomistically treated. We shall deal with these results in this order and cite what evidence we have found to substantiate them.

Task results are generally the most concrete and clear-cut of all the three categories. In our program task results are of four general kinds. The first of these is the projects which are built by each group in the class. All the material used in the building and investigation of these projects is filed for reference. These files reveal the fact that a voluminous amount of work goes into these projects, practically all of which is done outside of class. It is interesting to note that the motivation for this work is not primarily an instructor given grade since grades in this course are determined largely by the groups and the class. Group diaries suggest that the motivation stems in part from a bona fide interest in the project area selected. The range of these projects show that student interest is highly diverse. Some of the projects selected were—How to deal with prejudice in text books? What do eighth grade students think of their teachers? How to teach controversial issues. How to motivate students in a classroom. What are the factors causing failures in school? What are the characteristics of progressive education?

These projects were investigated by means of library research, questionnaire surveys, visits to schools, interviews with students and teachers, and comparative analysis of personal experiences. Even though in most cases these projects were built with great difficulty, it is increasingly obvious

as the semester progresses, that the students view their investigation and production of them with great pride.

A second group task result is the group diary. This diary is a concrete record of the group's activities and experiences which is kept in rotation by the individual members of the group. In this diary group progress can be followed, and differences in individual perceptions can be observed. It is therefore a valuable aid in diagnosing group difficulties, but it is also a projective indication of the kinds of changes in behavior which have occurred in the group. We have yet to solve the problem of what required structure will make the diary the most effective instrument for improving group functioning. At present there seems to be some difficulty in training students to write reports which are spontaneous expressions of their feelings and at the same time critically evaluative and analytical. This training is aided by encouraging students to refer to diaries of past classes for suggestions.

By means of the process of group self-evaluation a third type of task result—the individual grade—is produced. Although official grades are determined at the end of the semester, semi-official grades are produced at other times. It is interesting to see the way in which these grades change and also to note how the standards for grading are modified in the continual search for a method of valid evaluation. It is generally found that the students' satisfaction with their grades and the operational effectiveness of the standards increases as the semester progresses.

A final task result is obtained from the individual critical evaluations of the course, the instructor, and members of the class. In writing this report students are instructed to give their personal reactions to their experiences of the semester. There has been no formal structure indicated for doing this and our experience thus far seems to indicate that an unrestrictive structure is most productive. These evaluations point to the fact that the class as a whole, the group, and the instructor are factors about which student criticism should be focused.

Interpersonal or social results can be treated under two headings— changes in individual attitudes, and behavior, and changes in the pervading atmosphere of classes or groups. Evidence to substantiate these results comes mainly from the observations of the instructor and the observations of the students as recorded in their diaries and evaluations.

From the instructor's point of view the attitudes of individuals showed noticeable changes during the semester. This was particularly true in the case of those whose attitude at first was extremely negative toward the class procedure. There were some students whose first reaction was active hos-

tility, and many who showed decided displeasure. As the course progressed a majority of these became active participants, and some enthusiastic proponents of these methods and techniques.

The following excerpts from the diaries and evaluations indicate typical changes in the attitude and behavior of individuals.

1. "I realized that all the fault did not lie within the group, but within me. I had to coöperate in order to obtain results."

2. "I have never been an especially verbal person but in this group things were different. I had the security which I needed and no longer was afraid to voice my opinion. I took this feeling of security with me and began to feel free to speak in other classes."

3. "I have always been a leader or completely disinterested in previous relationships but here I tried also to be somewhat of a follower."

4. "Certain definite tendencies on the part of several members of our group have been changed. A smooth working relationship has been established between the most antagonistic members. This is easily recognized in the participation of formerly complacent, apathetic people on the one hand and a healthy rather than hostile withdrawal by formerly overly aggressive persons."

Changes in class and group atmosphere were even more outstanding, from the instructor's point of view, than the changes in individuals. In the first meetings of all classes the atmosphere was one of perplexed interest. Students were glad not to be bored in the conventional manner but saw no particular direction in the activities in which they were participating. This was followed by an atmosphere of tense anxiety due to concern over the lack of explicitly formalized course content. Textbook readings, subject matter outlines and even weekly tests were at this point sometimes requested. This all came to a crisis over the question of "How are we to be graded?" The resolution of this crisis was usually brought about through a class or group representatives council meeting devoted to a discussion of the purposes and meaning of the course. Even though much of this material was given at the beginning of the course, it was generally found that classes were not ready to absorb it at that time. Following this crisis most classes developed an atmosphere of permissiveness in which discussion was more efficient and participation more widespread.

Two typical student statements which corroborate this are as follows:

1. "Antagonism characterized my whole attitude on the first day of class meeting. . . . For the next two or three weeks everybody in the class seemed to be a bit bumfuzzled about what we, as pupils, should be doing.

No formal text assignments was something new. . . . This class is the first of my classes in which I've felt some degree of friendliness prevailing. . . . Part of this feeling was derived from the common interests we've all had. . . . It's been a healthy class in that anyone has had the right to voice his opinion and others the right to disagree with him. . . . There's been little or no occasion where offense has been taken personally. . . . There is a certain indefinable type of rapport that can bring about respect for others attitudes and ideals and interests that practical application of cold analysis of feelings cannot. Such was the situation in this group. For me it was a situation of growth."

2. "When I first entered the class in Education 202 I was rather disappointed to learn that the students of the class were to work in groups throughout the entire semester. . . . I disapproved of the method of group work. This view may be attributed to the competitive culture in which we live, the fact that I have not had a great deal of experience in group work, the nature of the course, or sundry other reasons. At any rate when I found myself in a group of strange and rather formal people I was quite unhappy and expressed my disapproval to some of my friends. . . . Nevertheless, this feeling of disapproval on my part both to the group and to the nature of the work presented soon gave rise to a feeling of apathy. Fortunately this feeling of apathy was merely a temporary affair; and a few weeks prior to the Christmas vacation I began to have a positive reaction toward the group as a whole. This conversion of sentiment cannot be attributed to a sole cause. One factor may be the result of the creation of common interests among members of the group. . . . However, I tend to attribute as a more important factor the increased sociability of the group. From a strictly formal and academic group we have developed into a friendly and warm group who combined both business and social matters in a highly successful manner."

The above statements taken from students' evaluations are but a small sample which is fairly typical of the sum total of all the evidence accumulated. From this, three facts at least seem to be clear. (1) Changes in individual and group behavior *do* take place throughout the progress of the course. (2) These changes are not rapid and often are not perceived until late in the semester. (3) The direction of these changes is from individual hostility and competitiveness toward group coöperation and permissiveness. More detailed analysis of results will have to wait until more scientific investigation is possible.

Cognitive results take the form of generalized learnings which develop

in the class and which can be applied to other educational situations. They are intimately related to changes in group and personality behavior, but they themselves are not changes in behavior. They are knowledge about how behavior can be more effectively changed and directed.

In this course evidence for cognitive results is found in the communication sessions, in the conclusions of the instructor, and in the statements made by the students of the things they have learned. Since the instructor's conclusions have been included in the main section of the paper, we can best treat the cognitive results which became apparent in reading diaries and evaluations.

On the basis of these sources the most impressive learnings seem to be in the area of interpersonal functioning. These learnings develop on two levels—that of heightened awareness of the existence and potential value of individual and group interrelationships, and that of knowing how to implement and use them. Since these two levels of learning are so intertwined, it is impossible to find student statements which deal with them separately. The following are quotations in which both of these kinds of learnings are expressed.

1. "I would make a rough guess that each individual's behavior toward the group is not a constant reaction. . . . The entire group is responsible for each individual's behavior. It is a group phenomenon. . . . One thing sure is that everybody cannot lead at once . . . it is just as good to know how to follow as it is to know how to lead."

2. "Working as a unit the group was able to bring forth more information to the class than one single individual could ever do in one semester's work. The responsibility of doing one's share in taking part in the group and in the classroom, I believe, was felt more keenly than just the responsibility of the teacher alone."

3. "How do you build the ideal? By doing. By thinking. By trying. Not by sitting and thinking alone—thinking alone is daydreaming. It may be satisfying to a certain point, but the greater pleasures of *doing* can never be known—being able to teach this idea and also its application to the diverse rôles of living is the teacher's greatest duty, I think. You can call it coöperation in a group—or between individuals—the idea is the same. The tools and methods for this have come out rather well during this semester."

Although the above quotations are typical of the students' statements of what they have learned, nevertheless it seems highly probable that other types of cognitive learning also took place. At present, however, adequate

instruments for extracting evidence for this have not been devised. Part of this is due to the fact that no adequate test has been devised for measuring changes in the cognitive processes of individuals.

Since this course is constantly in the process of developing a more explicit structure, critical evaluation of all those concerned with the entire process is a necessary part of its program. It is a fitting conclusion for this paper to list the criticisms of the course showing what changes they have brought about in procedure so far, and what problems they indicate for the future.

Student evaluations from the previous seven semesters yield the following criticisms and suggestions for improvement.

(1)   Make the catalog statement more explicit with respect to method and purpose of the class.

(2)   Give more orientation at the beginning of the course.

(3)   Allow more time before giving the sociometric test.

(4)   Have more deadlines, and structure the course more specifically.

(5)   Have several group communication sessions during the semester.

(6)   Change groups during the semester.

(7)   Allow more time for group meetings.

(8)   Give more attention to standards for grading.

(9)   Provide for some means of social activity for the class.

(10)   Introduce more effective interrelationships between groups and students in different groups.

(11)   Integrate this program more effectively with the other courses in the Education Department.

(12)   Keep classes small and get better physical facilities.

The following changes were made in subsequent semesters in line with these criticisms.

(1)   Catalog statement was rewritten by a committee composed of all faculty members teaching the course.

(2)   The original one day orientation was extended to the whole of the first week's class sessions. This also served the purpose of conditioning the class for the sociometric test (Criticism 3).

(3)   Deadlines were set for deciding when and where to meet, for concluding the "blueprint" stage of project building, for deciding what each individual's specific responsibility is, for communicating project results to the class, for handing in diaries to the instructor for evaluation, grading group members. All of these deadlines were written up in calendar form and distributed to the class at the first meeting. This calendar plan also

gave a rough idea of the kinds of experiences to be expected and the probable topics to be discussed at specific periods.

(4) Specific instructions were given to help groups in selecting a meeting time, building of projects, keeping diaries, making group decisions, developing standards for grading, and planning of communication sessions. A *Handbook for Group Development* was written outlining, in a step-wise fashion, the general method to be used in conducting this kind of training.

(5) Groups are now required to conduct three communication sessions a semester, instead of the original *one*.

(6) Groups were changed by a second sociometric test at mid-term for an experimental period of two semesters. With the development of the semester project, the restructuring of groups during the semester was eliminated as an unworkable procedure.

(7) Out-of-class group meetings were lengthened from one hour to one hour and fifteen minutes.

(8) The problem of grading was introduced prior to mid-semester when standards of performance and grading procedures were tentatively designed. Originally grading was not discussed until one week prior to the date final grades were due.

(9) A council of group representatives was instituted for the purpose of building better intergroup relationships with respect to group projects as well as social affairs.

(10) A committee organization was introduced in the Education Department which will attempt to more effectively integrate the Foundations courses with the other phases of teacher-training.

(11) Groups have been scheduled to record and listen to one of their early group meetings and one of their last ones. By this means it is hoped that groups will become more analytically process conscious and also become aware of the changes which develop in their method of conducting a group meeting.

Unfortunately budgetary limitations have not permitted much improvement in classroom acoustics or classroom facilities.

In looking toward the future, certain problems stand out as needing immediate investigation.

(1) How can a group build a project in which all of its members will become involved without ignoring the special interests of any individual?

(2) How can groups be led to coöperate rather than compete with each other?

(3) How can out-of-class and in-class activity be more effectively related?

(4) What structure in diary-keeping would make it most productive?

(5) How can the anxiety which develops in the evaluation process be reduced?

(6) How can training in techniques of observation be best introduced?

(7) How can class decisions be more integrally and functionally related to future action?

(8) How can group productivity be adequately measured?

(9) How can social group functioning be added to work group functioning as an integral part of this course?

(10) How can the relative effectiveness of different procedures and techniques be determined?

(11) How can content learnings be most adequately tested?

(12) How can the results of the most recent social science research be effectively brought to bear on this course?

The answer to this last question, which would also answer all of the others by implication, seems to be that we need a closer working relationship with those who are actively engaged in research in this field. This relationship would be a training-research partnership in which students in graduate schools would use our data as the raw material for their research, and in turn would supply us with those instruments and concepts by which our training could be improved. Through such an interchange teacher-training would not only be preparation for a vocation but also a laboratory for developing the most effective methods of interpersonal functioning.

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The items listed below are intended to give the sources of some of the ideas on which this paper is built. They do not refer to direct quotations, because in no case were they quoted from directly. They do, however, serve two kinds of functions, (1) as sources of the basic attitudes on which this paper is founded, (2) as accounts of other similar investigations into group-centered methodology. Since many of the items serve both functions no attempt will be made to separate them in this list.

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A Section on Group Psychotherapy in the American Psychiatric Association

The Council decided, at its meeting on November 7, to establish a Section on a "trial" basis for several years. As a result of this decision a Symposium on Group Psychotherapy, Theory and Practice, has been organized (Chairman, Dr. Winfred Overholser; Secretary, Dr. J. L. Moreno). The Symposium is scheduled for Friday, May 11, at 10:00 a.m. at the Netherland Plaza Hotel, Cincinnati, following the introduction of the incoming President-Elect of the American Psychiatric Association. Additional papers will be presented in the afternoon of the same day.

Round Table Conference and Dinner on Group Psychotherapy and Psychodrama

This Round Table marks the twentieth anniversary of the beginnings of this specialty within the American Psychiatric Association. Moderator of the meeting is Dr. Alan Gregg. There will be approximately ten speakers. A number of *special guests* will be present, pioneers and leaders of group psychotherapy and psychodrama. An effort is being made to have all those who have enriched or sponsored these new forms of therapy present in person or represented. Besides the listing of the Round Table Conference in the program of the American Psychiatric Association a special bulletin will be released featuring the occasion, listing all the special guests, speakers and some historical highlights.

Sections or Symposia on Group Psychotherapy in Other Organizations

The International Congress of Psychiatry held a symposium on Group Psychotherapy in Paris, France, on September 24, 1950. The Group for the Advancement of Psychiatry (GAP) has been contacted for the purpose of establishing a Committee on Group Psychotherapy within its framework.

Membership, Membership Dues in the American Society of Group Psychotherapy and Psychodrama, and Subscriptions

In the last issue of the journal, *Group Psychotherapy*, Vol. 3, No. 2-3, August-December, 1950, we reported one hundred and twelve new members since July, 1950. Since then the new membership has doubled, about two hundred and fifty new members having joined in six months. We are able, therefore, to continue the membership dues of $3.50 per annum, including subscription to the journal, *Group Psychotherapy*. Foreign members pay $1.00 additional to cover postage and handling. Subscription rate of this journal for non-members is $8.00 per annum in the U. S., foreign $1.00 additional.

New Constitution of the American Society for Group Psychotherapy and Psychodrama

All members are requested to attend the business meeting to be held on Saturday, February 17, at the Hotel Commodore at 4:30 p.m. There are important matters to discuss, problems like the new Constitution which has been drafted, membership status, organizational and election procedures, etc. will be presented to the membership.

Dr. J. L. Moreno, Candidate for the Presidency of the American Psychiatric Association

Having been petitioned by a large number of Fellows and Members of the American Psychiatric Association, J. L. Moreno's name will be on the ballot for the 1951 general elections.

New Editors of Sociometry

Helen H. Jennings has resigned because of other obligations. The new Editors in Chief are: Frederic M. Thrasher, New York University, and Leona M. Kerstetter, Hunter College; Associate Editor: Edgar Borgatta, New York University; Managing Editor: Joan H. Criswell, Bureau of Naval Personnel, Washington, D. C.

The Journal "Group Psychotherapy"

Table of Contents of forthcoming issue, March, 1951: Drs. S. H. Foulkes, "Remarks on Group Analytic Psychotherapy"; Pierre Renouvier, "The Group Psychotherapy Movement, Its Pioneers and Founders"; J. L. Moreno, Edgar Borgatta and Theodore Jackson, "Group Psychotherapy and Sociodrama in Industry"; Martin Grotjahn, "Special Aspects of Supervision in Group Psychotherapy"; J. W. Klapman, "Group Psychotherapy; Social Activities as an Adjunct to Treatment"; J. H. Pratt and Paul E. Johnson, "Group Psychotherapy at the Boston Dispensary"; H. Michael Rosow and Lillian P. Kaplan, "Individuo-Group Psychotherapy"; H. R. Teirich, "Group Psychotherapy in Austria and Germany"; "Instructions on How to Form Therapy Groups"; "Open Forum".

Workshop in Group and Action Methods

This workshop is being sponsored for the second year by the Board of Education of the City of New York in cooperation with the Moreno Institute. The workshop is to be held at the Institute at 101 Park Avenue, New York City, and to be given to a selected group of teachers specializing in guidance and counseling who will get in-service-training-credit for salary increment. The new semester begins February 5, 1951.

Demonstrations of Group Psychotherapy and Psychodrama

Working as a team, Dr. and Mrs. J. L. Moreno have been conducting clinical workshops at the following places in recent weeks: Phipps Psychiatric Clinic, Johns Hopkins Hospital, Baltimore, Maryland; Veterans Administration Mental Hygiene Clinic, Philadelphia, Pa.; State Hospital, Milledgeville, Georgia; Veterans Administration Hospital, Tuskegee, Alabama; Veterans Administration Hospital, Tuskaloosa, Alabama. The Moreno Institute, Beacon, New York, will be glad to suggest to inquirers teams of psychiatrists and psychologists trained in group and action methods for seminars to be conducted in their own locale.

Group Psychotherapy and Psychodrama Projects

The following have been working on such projects recently: Drs. D. P. Morton and C. L. Morgan, Veterans Administration Mental Hygiene Clinic, Philadelphia, Pennsylvania; Dr. J. D. Combs, State Hospital, Milledgeville, Georgia (Superintendent Dr. Thomas G. Peacock); Allen's Invalid Home, Milledgeville, Georgia; Drs. P. P. Barker, James T. Morton, Veterans Administration Hospital, Tuskegee, Alabama; Drs. Louis Byers, T. J. Thomas, Martin J. Brennan, Veterans Administration Hospital, Tuscaloosa, Alabama.

PROGRAM, NINTH ANNUAL MEETING, AMERICAN SOCIETY FOR GROUP
PSYCHOTHERAPY AND PSYCHODRAMA, FEBRUARY 16 AND 17, 1951
COMMODORE HOTEL, NEW YORK, N.Y.

Members of the American Society of Group Psychotherapy and Psychodrama, and members of the American Sociometric Association are invited to attend all meetings. There is no registration fee for them. Non-members pay $2.00 registration fee, including participation in the Sociodrama session on Friday, February 16.

Please register at your earliest convenience if you wish to attend the Dinner on Friday, February 16 and Luncheon on Saturday, February 17.

Phone Ed Borgatta, Astoria 4-1807, or write him at: 25-18 8th Street, Long Island City 2, New York, for further information.

PROGRAM

Friday, February 16

6:30-7:00 P.M., Registration in CENTURY ROOM. Pick up Dinner and Luncheon tickets at desk.

7:00-8:30 P.M., Dinner in CENTURY ROOM. Introductory remarks

at the opening of the meeting by Dr. Wellman Warner, (Chairman, Department of Sociology, New York University).

Speaker (to be announced): "The Beneficial and Pathological Influence of Mass Media." Special guest: Dr. Jacob Greenberg (Board of Education, New York City).

9:00-11:00 P.M., PRESIDENTIAL ADDRESS by L. J. Moreno, M.D., "Group Psychotherapy and Sociodrama in the Community," with Demonstration.

Saturday, February 17

8:45-9:15 A.M., Registration in South Room. Pick up Luncheon tickets at desk.

9:15-10:50 A.M., South Room. ROUND TABLE CONFERENCE, "Group Psychotherapy and Psychoanalysis." Moderator: Louis Wender, M.D. (Pinewood Sanitarium, Katonah, N.Y.). Speakers: Drs. Rudolf Dreikurs (Chicago Medical College), Gerhard Schauer (VA Mental Hygiene Clinic, Brooklyn), Max Day (Boston State Hospital), J. L. Moreno (Beacon Hill Sanitarium).

11:00-12:45 P.M., South Room. ROUND TABLE CONFERENCE, "Group Psychotherapy and the Treatment of Minority Problems." Moderator: Nathan W. Ackerman, M.D. (Psychoanalytic Clinic, Columbia University). Speakers: Drs. Frederic Wertham, (Mental Hygiene Clinic, Queens General Hospital), Ed Borgatta (Sociometric Institute), Rutherford Stevens (VA, Regional Office, New York), Sol W. Ginsburg (New York City Committee on Mental Hygiene), Marie Jahoda (Columbia University), Aaron Karush (Psychoanalytic Clinic, Columbia University), Lionel Ovesey (Psychoanalytic Clinic, Columbia University).

12:50-2:45 P.M., CENTURY ROOM. ROUND TABLE LUNCHEON CONFERENCE, "Group Psychotherapy in General and Mental Hospitals." Moderator: Vernon C. Branham, M.D. (VA, Washington, D.C.). Speakers and Special Guests: Drs. J. H. Pratt (New England Medical Center, Boston), Bernard Cruvant (Saint Elizabeths Hospital, Washington, D.C.), E. H. Crawfis (Cleveland State Hospital), J. J. Geller (Paterson Mental Health Center), Oscar Pelzman (Creedmoor State Hospital), Nathan Breckir (Commission on Group Psychotherapy in Mental Institutions), Jose Gurri (Boston State Hospital), A.M. Schneidmuhl (Spring Grove State Hospital, Maryland), D. P. Morton (VA Mental Hygiene Clinic, Philadelphia), Marguerite Wolf (Beacon Hill Sanitarium), Clarence E. Boyd (Middleton, Conn.), Theresa Muller

(Boston State Hospital), C. L. Morgan (VA Mental Hygiene Clinic, Philadelphia), Edith Varon (Phipps Psychiatric Clinic), Mildred Berl (Washington, D. C.), Kathryn K. Rice (Washington, D. C.).

2:50-4:30 P.M. Century Room. ROUND TABLE CONFERENCE, "Group Psychotherapy and Psychodrama, Theory and Practice." Moderator: James Enneis (Psychodramatist, Saint Elizabeths Hospital, Washington, D. C.). Speakers: Drs. John S. Pearson (Minnesota Department of Welfare), Paul E. Johnson (Boston University), Arthur Bachrach (University of Virginia at Charlottesville), J. L. Moreno (Beacon Hill Sanitarium), Eya Rudhyar (Psychodramatic Institute), Gertrude Harrow (VA Mental Hygiene Clinic, Chicago), Leona Kerstetter (Hunter College), Zerka T. Moreno (Psychodramatic Institute), Betsy Buck (Psychodramatic Institute), Joseph I. Meiers (State Hospital for Epileptics, Parsons, Kansas).

4:30:5:15 P.M. South Room. MEMBERSHIP MEETING. Presiding: J. L. Moreno, M.D., Secretary: Leonard K. Supple, M.D. All members are urged to attend this meeting which involves the streamlining of the Constitution and formulation of future policy.

No papers are to be read at the meetings, all presentation is to be extemporaneous (except for statistical tables, diagrams, charts, etc.). Speakers are invited to prepare formal papers for consideration for inclusion in one of the forthcoming issues of the journal, *Group Psychotherapy*. Speakers are further invited to present papers in mimeographed form, mailing them to Dr. Leonard K. Supple, Secretary, P.O. Box 403, Beacon, New York, well in advance of the meeting, in whatever number of copies they see fit. They may then be obtained by interested members before or during the meeting at the registration desk.

The following papers are expected to be on hand: Rudolf Dreikurs: "The Unique Social Climate Experienced in Group Psychotherapy"; Eya Rudhyar: "Methods of Sound and Movement as an Adjunct to Psychodrama"; Edith Varon: "Group Psychotherapy of Schizophrenic Women and their Mothers"; E. H. Crawfis: "Group Psychotherapy of Deteriorated Psychotic Patients"; Arthur Bachrach: "The Problem of Applying Group Psychotherapy to a Fast-Changing Hospital Population"; Oscar Pelzman: "Group Psychotherapy at Central Islip State Hospital"; James Enneis: "Psychodrama and Sociometry at Saint Elizabeths Hospital"; Abraham M. Schneidmuhl: "Group Psychotherapy, Psychodrama and Patient Self-Government at Spring Grove State Hospital"; Paul E. Johnson: "Group

Psychotherapy with Psychosomatic Patients"; Bert Hansen: "Indian-non-Indian Relations in Western Montana"; John S. Pearson: "Administrative Problems in the Integration of Group Psychotherapy Into A State Mental Health Program"; Joseph I. Meiers: "Psychodrama and the Citizen"; Bernard Cruvant: "Administrative Group Psychotherapy for Patients in Maximum Security"; Blanche M. Baker: "Child-Parent Relations, an Adventure in Group Psychotherapy with Parents"; Jose Gurri: "Follow Up Results of Group Psychotherapy with Psychotic Patients at Boston State Hospital"; Max Day: "Preliminary Report on Group Therapy with Psychotically Depressed Males."

Moreno Institute, Chartered by the Board of Regents

The Moreno Institute, the successor of the Sociometric Institute Inc., has been incorporated by the Board of Regents of the State of New York and granted a *provisional charter*. The Institute will continue the program of the Sociometric Institute founded in 1942. The new catalogue announcing schedules of courses in group psychotherapy, psychodrama and sociometry, at the New York and Beacon branches, staff of instructors and details as to fees and enrollments will gladly be sent upon request.

Fees are moderate, a few part-scholarships are available. Special rates are given to veterans.

Summer courses in Beacon start July 1; fee, covering room, board and tuition: $70.00 per week; registration fee $5.00. Students may enroll for periods of not less than four weeks. A minimum training period of three months is recommended for all those who wish to specialize in these group and action methods.